THE CORNELL FELINE HEALTH CENTER • CORNELL COLLEGE OF VETERINARY MEDICINE

# at Watch



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

THIS JUST IN

# **U.K. Food Recall**

Increased pancytopenia cases point to a food

eline pancytopenia is a potentially fatal illness characterized by a decrease in red blood cells, white blood cells, and platelets. Since April 2021, veterinarians in the United Kingdom have documented over 350 cases of feline pancytopenia. Normally, there are few cases in this period of time.

Owners reported noticing a poor appetite and a decrease in activity in affected cats. More specific signs included evidence of bruising or bleeding, including blood noted in vomit or stools and bleeding from the mouth. Treatment for the disease is supportive and may include blood transfusions.

The mortality rate in affected cats is about 70%, according to the Royal Veterinary College, University of London. Known causes of pancytopenia include toxins, infections, and some cancers. This time, however, veterinarians are concerned about a possible link to foods from Fold Hill. The company immediately began a voluntary precautionary recall of the foods. While the link between the foods and the illness has not been proven, investigations are continuing.



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# 5 Things: Proper Dietary Changes

It can be a challenge to change your cat's food

Mix things up right away and consider variety. When you're adopting a kitten or new cat, "my best advice is to feed kittens both wet and dry foods, so they are used to both forms from the get go," says Joseph Wakshlag DVM, PhD, DACVN, DACVSMR, veterinary nutritionist and professor in the Department of Clinical Sciences at Cornell University's College of Veterinary Medicine. "In the end, it's hard to switch the old timers to a new form." Mixing canned food with dry at least once a day works well (pick up leftover wet food after a few hours).



Start prescription diets right away. If your veterinarian recommends a prescription diet, start it right away, especially with diseases like chronic kidney disease, with which appetite can be diminished in advanced cases. The likelihood of acceptance is higher the sooner you begin.

Most dietary changes should be gradual. If your cat is used to eating the same diet every day-and your veterinarian did not advise you to feed a prescription diet-you shouldn't make an abrupt change. Mix 25% new food with 75% old diet at first, then go to 50/50, then 75/25 before totally shifting to the new food. Be patient! "When doing the switch for the discriminating cat, it should be done gradually over a month to promote acceptance," says Dr. Wakshlag.

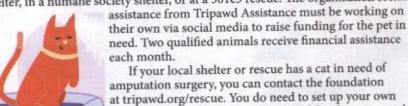
Make the new diet more enticing. Warming food increases its odors, making a short zap in the microwave well worth the effort. You can try tasty "toppers" such as a dab of meat-flavored baby food (no onion or garlic flavoring) or a small amount of plain yogurt.

Ask for help if you need it. Prescription appetite stimulants like mirtazapine (Mirataz) can entice cats to eat. This drug can be given orally or via a transdermal ointment that can be applied to the inside of your cat's ears.

# Tripawd Assistance for Rescues and Shelters

Amputation surgery assistance for cats

the Tripawds Foundation's Rescue Fund will pay \$500 toward the cost of amputation surgery for cats and dogs in need that are under the care of a public shelter, in a humane society shelter, or at a 501c3 rescue. The organization seeking



If your local shelter or rescue has a cat in need of amputation surgery, you can contact the foundation at tripawd.org/rescue. You do need to set up your own fundraising to get the first \$500 raised for them to match. https://tripawds.org/rescue.

# **Cardiac Gene Mutation in Sphynx Cats**

Finding may provide a clue for disease development

ypertrophic cardiomyopathy is a devastating disease that causes the heart muscle to thicken and makes it less efficient. The disease is most prevalent in Chartreux, British Shorthair, Maine Coon, Persian, Ragdoll, and Sphynx cats, with genetic mutations believed to be a likely cause in

Researchers at North Carolina State University recently identified such a genetic defect in Sphynx cats. The Alstrom syndrome protein 1 (ALMS1) gene codes for a unique protein whose function is not fully understood but is likely involved with metabolism, cell differentiation, and replication, including effects on perinatal cardiomyocytes (heart muscle cells). A mutation inhibiting this gene and leading to a decreased production of the protein was shown to be associated with heart disease in mice and humans.

A family of Sphynx cats that developed hypertrophic cardiomyopathy showed this genetic mutation in most of them. The researchers

compared the family of Sphynx to normal cats of other breeds, concluding that the genetic variant was primarily in the affected Sphynx. Unfortunately, normal Sphynx were not included in the study, making it difficult to say whether this defect is found in most Sphynx cats.

Cats with this mutation varied greatly in the age of onset and the severity of disease. In humans with this mutation, many additional factors are involved in cardiac disease development, which is likely to be the case in cats as well.

Meurs, K.M., et al. A deleterious mutation in the ALMSI gene in a naturally occurring model of hypertrophic cardiomyopathy in the Sphynx cat. Orphanet J Rare Dis 16, 108 (2021).

# **Kitty Litter and Disease Transmission**

Study on coronavirus spread among cats sharing a litterbox

nteric coronavirus is a highly contagious viral disease that is passed in the feces of infected cats, where it can then infect other cats. The litterbox can serve as a source of coronavirus infection, as cats can step in the feces of infected cats and then ingest the virus while grooming. While coronavirus infection is most commonly well tolerated by cats (it may cause mild gastrointestinal signs), in approximately 5% of cases, viral mutation can cause the commonly fatal disease feline infectious peritonitis,

A recent study investigated the effect of different cat litters on the ability of feline coronavirus to infect both feline embryonic cells and intact cats after incubation of virus with litter or infection of cats living with other non-

infected cats in multiple-cat households.

While this study is preliminary, and follow-up studies are necessary to establish its validity and practical applicability, its results suggest that certain litters may minimize the ability of feline coronavirus to be transmitted (primarily earth and wood pellet-

based litters, according to the study findings) to cats susceptible to the feline coronavirus infection (this study did not specifically evaluate COVID-19).

J Feline Med Surg. 2020 Apr;22(4):350-357. doi: 10.1177/1098612X19848167

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Send questions and letters to the editor: CatWatch\*

535 Connecticut Ave. Norwalk, CT 06854-1713 catwatcheditor@cornell.edu

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# **Spotting Soft-Tissue Trauma**

Muscle and skin injuries can be difficult to detect

ats have 517 muscles, and they seem to find just as many creative ways to damage them. Whether it's a leg caught in furniture, a fall, or getting shut in a door, cats prove every day that their incredible flexibility and athleticism is not enough to keep them out of trouble.

"From a traumatic standpoint, I would prioritize bite wounds with cats living outside but also sometimes in households with other pets. However, outdoor cats can experience other forms of trauma including being hit by cars that can damage soft tissue," says Christopher W. Frye DVM, DACVSMR, CVA, assistant clinical professor and section chief of Sports Medicine and Rehabilitation at Cornell University's College of Veterinary Medicine.

Bleeding that continues even when you apply pressure requires prompt veterinary care to control the bleeding, assess the damage, and treat accordingly.

Limping without other symptoms or a known traumatic event is not an emergency. You can wait to get an appointment during regular business hours. While you wait for your appointment, confine your cat to one room so he isn't running around doing additional damage to the hurt leg.

"Some soft-tissue injuries are obvious and even emergent, such as hit-bycar accidents," says Dr. Frye. "In those situations, an emergency visit to assess



Cats often assume they won't fall off high ledges, but it can happen. When it does, they may act rather cool about it, not letting on that they hurt themselves.

the extent of injury and stabilize the patient is important before addressing longer term wound-care management."

Even if your cat walks off and seems fine after an accident, he should be examined by your veterinarian promptly. Internal injuries and internal bleeding can get dramatically worse over time, and your cat's adrenaline may be masking some of his pain.

Potential soft-tissue injuries are an emergency if:

- ▶ The cat has been hit by a car.
- The cat has been attacked by a large animal or a person.
- ▶ The cat is bleeding heavily.
- The cat is unconscious.
- The cat is lethargic or non-responsive.
- The cat is having difficulty breathing.

### What You Can Do

If you suspect your cat has a soft-tissue injury, you can:

- Schedule a veterinary exam and let the staff determine whether your cat's situation is an emergency.
- Apply pressure to bleeding wounds with a clean cloth.
- Ice injured limbs or areas for up to 15 minutes. Use an ice pack or frozen vegetable package to help to control pain and inflammation.
- Restrict activity. Moving around a lot will put stress on the injury and could worsen it.

### **Bite Wounds**

Cats' tiny, sharp teeth create deep puncture wounds that are frequently difficult to spot unless you know a fight took place. "With bite wounds, cats may not show obvious signs of soft tissue damage, but instead limp or act depressed and interact less," says Dr. Frye. Bite wounds from a dog are generally easier to see, but in some cases may not be obvious until you closely examine your cat's skin in the area where he seems to be sore.

"Often, the wounds are infected and can form an abscess over time that needs to be addressed by a veterinarian," says Dr. Frye. "Many times, the abscess needs to be drained, cleaned, and explored to ensure the wounds are not extending further into other vital areas of the body, such as inside the abdomen. The patients often require antibiotics, wound care, and rabies vaccination boosters—another reason to always ensure pets are up to date on vaccines."

Some bite wounds may require surgery, but often they heal on their own once any infection has been resolved.

### Hit By Car

The first injury that most cat owners suspect when their cat is hit by a car is broken bones, but just because the x-rays don't show any fractures doesn't mean your kitty will be back to 100% tomorrow. The force of the impact will often bruise and damage muscles, even causing tears in muscles and ligaments.

One severe soft-tissue injury that can occur when a cat is hit by a car is brachial plexus avulsion. The brachial plexus is the network of nerves that works together to control your cat's front legs. If his leg is violently wrenched away from his body, these nerves can become stretched or even severed from the spinal cord. When this happens, the cat will lose control of the affected front leg. He will drag that paw, be unable to bear weight on that leg, and be unable to feel sensations in part or all of the leg and paw. If the nerves have just been damaged, there is potential for recovery with physical therapy, but if the nerves have been completely avulsed (or severed), there is no treatment and the limb will likely need to be amputated.

### **Muscle Tears and Strains**

Whether your cat is an athlete or a couch potato, sooner or later he will likely experience some sort of muscle injury. He might misjudge a leap and suffer a crash landing, or get a paw stuck in a drawer handle or chair rung while climbing.

In any of these cases (and many others), your cat will likely show that he has hurt himself by limping or flinching when touched in a particular part of his body. The lameness might be subtle or only apparent when he first gets up after a rest, or it might be persistent. In some cases, he may even refuse to bear weight on the injured leg. In rare cases, a cat with a muscle strain may cry out.

If you detect any indication of pain, bring the cat to the veterinarian to rule out serious injuries. Your veterinarian can also provide medications to aid healing and help curb pain.

# **A URI With Extra Oomph**

# Calicivirus is a hardy respiratory virus

ne of the most common causes of upper respiratory infection (URI) in cats is feline calicivirus (FCV). Cats kept at home and/or in a small, stable group have about a 10% chance of being infected with this virus, while cats in more crowded conditions have a roughly 90% risk of infection.

The initial signs of calicivirus infection are similar to those seen in other URIs. You might notice a nasal or ocular discharge with sneezing or coughing. Affected cats often have conjunctivitis, which is a painful swelling of the mucous membranes around the eyes. It often causes a clear ocular discharge, and most cats squint or rub their eyes due to discomfort.

These cats usually feel and act unwell. They are commonly inactive and depressed and may develop oral ulcers, which can cause drooling and pawing at their mouths.

Some infected cats are left with chronic oral stomatitis, a painful inflammation/ulceration of the tongue, palate, lips, and inner cheeks, and gingivitis. Not surprisingly, an infected



Discharge from the eyes or nose may be a sign of calicivirus.

cat's voice may sound different, and many cats develop a fever.

Affected cats' appetites are often greatly diminished, as the oral ulcers can make eating painful; and the nasal discharge can block a cat's sense of smell (a cat's appetite is highly dependent on its ability to smell food).

Some cats, especially young kittens, may develop pneumonia due to secondary bacterial infections, often

making them seriously ill.
Older kittens and young cats
may develop painful joint
inflammation accompanied
by respiratory signs. The
lameness is often temporary
without residual effects.

#### Spread

Calicivirus is a hardy virus, surviving for up to a month in the environment, depending upon conditions. It is usually spread through saliva and nasal secretions during direct contact between cats, but also via contaminated bowls, bedding, and even people. Bleach will kill the virus, but ordinary laundry detergent will not.

The incubation period for calicivirus is two to six days, followed by two to three weeks of illness in uncomplicated cases. An infected cat can shed the virus for a couple of weeks,

even after they stop showing signs of illness. Some cats will continue to shed virus throughout their lifetime. "Carrier" cats rarely show any signs of illness but are infective. Female carriers can infect their kittens at birth.

### Diagnostics

Diagnostic testing is not always necessary except in difficult or chronic cases, as a presumptive diagnosis is often made based upon characteristic clinical signs. A diagnosis can be confirmed by identifying genetic material of the virus in samples from the mouth, nose, or eyes (using PCR technology). Depending upon the severity of disease, X-rays of the lungs and/or acquisition of samples from the lungs via a procedure called a transtracheal wash may be pursued.

#### Treatment

Hospitalization is only necessary for severe cases. Home supportive care and isolation is generally adequate. You can use warm compresses to loosen crust on the eyes and nose. Your veterinarian may recommend saline nasal drops to loosen up debris. You can also use a nebulizer or keep your cat in the bathroom while you shower so that the steam can help ease her breathing.

To entice eating, try soft foods for easier swallowing. Warm savory items slightly in a microwave or add some tuna juice or low sodium chicken broth to increase the food's smell.

Clean everything you can—bowls, toys, brushes, blankets, floors—used by the sick cat with a dilute bleach solution (1 part bleach to 32 parts water). Then, isolate her to a specific small area, which you will need to continually clean. It is also a good idea to wash your hands thoroughly after interacting with an infected cat.

Antibiotics are only used if a secondary bacterial infection develops. While some antiviral drugs have shown some promise in treating FCV infections, their usefulness is currently the subject of debate among veterinarians.

In cases with severe oral ulceration/ inflammation, steroids may be prescribed by your veterinarian in an attempt to control the inflammation and make an infected cat more comfortable.

#### Prevention

Fortunately, both injectable and intranasal calicivirus vaccines are available, and FCV vaccination is



A rare but potentially devastating strain of calicivirus can cause severe systemic disease characterized by high fever, depression, edema of the face and legs, and jaundice (pictured). Infections by this strain can result in a mortality rate as high as 70%.

considered a core vaccine that is recommended for all cats. While these vaccines may not prevent infection in all cases, they significantly decrease the incidence of serious illness and generally stop shedding of the virus.

The CaliciVax vaccine includes modified forms of a strain of FCV that causes FCV-associated virulent systemic disease (FCV-VSD) and a typical strain of FCV. This vaccine may offer some protection against outbreaks of FCV-VSD, according to the Baker Institute for Animal Health at Cornell, but since the virulent strains that cause these outbreaks arise from different mutations in less aggressive strains, the vaccine's effectiveness is not yet clear. It is not a core vaccine.

Your cat should be appropriately vaccinated against calicivirus as prevention. Any cat showing signs of respiratory illness should be isolated from other cats in the family. If nursing care does not suffice to get her eating and feeling better within a couple of days—or if symptoms worsen—a veterinary visit is in order.

## **Mutant Strain of FCV**

Rarely, a mutant strain of FCV will spontaneously arise, leading to FCV-associated virulent systemic disease or FCV-VSD. The first known outbreak of FCV-VSD occurred in Northern California in 1998. Unlike most viral upper respiratory infections in cats, this version has a high mortality rate of over 50%.

Cats with FCV-VSD usually become very sick. Along with a high fever, these cats may have swelling of the face, head, and limbs. Crusty sores may develop on the nose, around the eyes and ears and on the pads of their feet. Liver damage can lead to jaundice, a yellow pigmentation usually seen in the ears, mouth, and the whites of the eyes. Some cats will hemorrhage under the skin (looks like bruising) or in the intestinal tract, leading to blood in the stools.

The calcivirus mutates readily, which results in new strains of the virus that may not be fully covered by the currently available vaccination. However, a vaccinated cat usually has a less severe case of the virus.

# The Aging Cat Needs a Careful Eye

Growing older comes with inevitable changes, but age is not a disease

hen we hear someone tell us our senior cat "looks really good for her age," we might want to give some thought to that qualifier "for her age." It's important.

While aging is not a disease, it does come with inevitable physiological changes that affect not only the way our cat looks, but the way her body functions as well. It can be easy to brush off physical and mental changes as part of growing older, but the aging process naturally makes our cat more prone to disease. To increase our cat's longevity and quality of life, we need to discriminate between natural aging and early signs of illness so we can intervene early and provide veterinary and nutritional support.

Cats make this difficult, of course, hiding mild signs until they hit a threshold where they can no longer function properly. This often makes it seem like a disease came on suddenly, when the truth may be that it's been insidiously coming on for months.

Normal general aging events include:

- cognitive changes similar to people
- decreased wound healing
- diminished ability to digest nutrients
- decreased kidney size and blood flow
- hearing loss
- ▶ joint cartilage deterioration
- lowered immunity
- muscle loss (sarcopenia)
- > thin, fragile skin
- vision changes
   Signs not associated with normal

# What You Can Do for Your Aging Cat

- Stick to senior wellness exams twice a year. A lot can change in six months during this life stage.
- Nutrition is critical. Choose a highly digestible, good-quality diet formulated specifically for senior cats.
- Make life easier. Consider an easily accessible litterbox with low sides on every level of your home. Food and water bowls on every floor help, too, and night lights throughout your home will help your geriatric cat navigate at night.
- Joint supplements with glucosamine/chondroitin combinations can keep your
- aging cat's joint cartilage healthier. The omega fatty acids found in fish oil can also support joint health and provide general antiinflammatory benefits that may help stave off cognitive dysfunction.
- Check your older cat's mouth regularly for odor or bleeding and note any discomfort associated with eating.
- Since senior cats can find the physical act of self-grooming difficult, schedule for regular combing, brushing, and claw trimming.



While aging is not an illness, it does bring with it a number of physical difficulties. Be alert to your cat and make a veterinary appointment if something seems amiss rather than thinking, "She's just getting old."

aging that may indicate disease include:

- decreased appetite
- difficulty breathing
- excessive thirst and urination
- inappropriate elimination (urinating/ defecating outside the box)
- ▶ lameness
- lumps/bumps/swellings
- nighttime yowling/wandering/pacing/ withdrawal from family
- oral pain/odor or difficulty eating
- painful urination/defecation
- persistent vomiting/diarrhea
- weight loss
- significant lethargy

If your cat shows any of these indicators, see your veterinarian. Be prepared to provide a thorough and complete history, which will help your veterinarian immensely in diagnosing and treating your cat. Your veterinarian will do a physical exam, including neurological and orthopedic assessment, assessing your cat's overall condition and weight, and noting overall muscle loss.

Appropriate diagnostic tests may include blood work, urinalysis, urine culture, chest/abdomen x-rays, and abdominal ultrasound. Where you go from there depends on what is found with the preliminary testing. The most common geriatric cat diseases are chronic kidney disease, hyperthyroidism, diabetes mellitus, cancer, dental disease, osteoarthritis, and cognitive decline (like Alzheimer's in people).

Assisting an aging cat nutritionally, medically, physically, and environmentally enhances her health, longevity, and quality of life. Partnering with your veterinarian to provide the best nutrition and care enhances your relationship with your cat and keeps her going strong for as long as possible. Earlier detection of disease is better for your cat, for you, and for your wallet.

To increase our cat's longevity and quality of life, we need to discriminate between natural aging and early signs of illness so we can intervene early and provide veterinary and nutritional support.

# **Dementia in Older Cats**

# Subtle signs of cognitive dysfunction may appear

cat that lives to be 20 years old is the approximate equivalent of a 96-year-old person. And, unfortunately, many cats eventually show signs of cognitive dysfunction (like dementia). Up to a third of cats 11 to 14 years old may have cognitive dysfunction. That may rise to 50 percent for cats over 15 years old.

Some of the changes you may notice are easy to live with, but others can be dangerous for your cat and frustrating for you.

After having an examination by your veterinarian to rule out medical issues, you can do several things that may help keep your cat's mind sharp and reduce symptoms of cognitive dysfunction.

New toys, exercise (like chasing a feather on a wand), and teaching tricks are great ways to improve learning and memory.

Make a point of regularly engaging your cat's brain starting from when you first bring her home. If your cat's brain is in good shape to begin with, she'll be ahead of the game as she ages.

Remember that cats like schedules. Serve meals at the same time, so that she'll know when to expect them. If you leave food out for her all the time, plan a couple times to give her a special treat that she can look forward to.

Encourage your cat to keep a regular sleep schedule as well. If she is napping more frequently during the day, gently wake her up and carry her around, petting her or try to get her to play. Preventing too many daytime slumbers will make it easier for her to sleep at night and help cut down on the nocturnal wanderings.

Food, water, and litter boxes should be easily accessible for your cat and should always be kept in the same spot. If your cat has difficulty navigating stairs, consider a little ramp for her to use. If she is disoriented or visually impaired, doors and baby gates can keep her confined to a part of the house where she can get to everything she needs and can't get lost, stuck, or injured.

Your veterinarian may prescribe medications for your cat. Selegiline hydrochloride is approved for cognitive dysfunction in dogs, but some veterinarians use it for cats as



Favorite toys should still be enjoyed! If not, there may be a problem.

well. Fluoxetine and other anti-anxiety medications can help to cut down on behavioral changes due to stress and disorientation. Using cat pheromones may help to keep your cat calm.

Be careful with your choices and discuss them with your veterinarian. Some drugs, like pain medications, anesthetic drugs, and perhaps even supplements containing iron, should be avoided for these cats. Before adding any supplement purported to help with cognitive dysfunction, discuss the product with your veterinarian. Research does not generally support their use at this time.

# **Behavioral Changes**

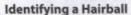
Signs that indicate dementia include:

- Aggression
- Altered sleep cycles
- Disinterest in food and water
- Disorientation
- Inappropriate elimination
- Irritability
- Loud vocalizing
- No interest in favorite toys
- Reduced interaction with people
- Wandering

# **Worry or Wait? Vomiting**

As you clean up, look at what your cat spewed

nowing what your cat has expelled from her stomach can give you clues as to whether it is a cause for concern. Hairballs are a routine part of being a cat, as is occasional vomiting due to minor stomach upset. But frequent hairballs can indicate a looming obstruction, and persistent vomiting can indicate a wide range of diseases and illnesses. It's important that you identify what's happening.



Hairballs, technically known as trichobezoars, are clumps of hair that form in your cat's stomach due to normal grooming habits. Hair is mostly keratin, which can't be digested. Some hair will travel through the digestive tract and come out in the stool, while some will remain in the stomach and gather into a ball. Sooner or later, this mass of hair irritates the stomach, and the cat vomits it up.

Hairballs are approximately the same color as your cat's hair, but darker due to exposure to her food and gastric secretions. Despite being called a "ball," they are usually more log-shaped than spherical after a trip through the esophagus. Hairballs can frequently be mistaken as poop at first but are not as stinky (see "Trichobezoar Means 'Hairball," August 2020 at catwatchnewsletter.com).

### **Identifying Vomit**

The appearance of vomit can vary widely depending on what is in your cat's stomach at the time. If she ate

### What You Can Do

If your cat is a frequent victim of hairballs and/or vomiting, keep track of when these episodes occur and any other symptoms. This can help you to determine if she requires veterinary attention and may be helpful to your veterinarian in determining the underlying cause.

Concurrent vomiting and diarrhea usually requires prompt care because cats can quickly become dehydrated in this situation.



Your cat finds vomiting no more pleasant than you do.

recently, you may recognize her food or treats. If she has been snacking on cat grass or your houseplants, you will see plant material. For a cat with an empty stomach, the vomit may be primarily clearish liquid with yellow bile and/or some white foam.

Vomit can also be streaked with blood, which indicates an injury or irritation somewhere between the mouth and stomach.

#### Worry or Wait?

A hairball every week or two isn't anything to be concerned about, and occasional isolated episodes of vomiting without other symptoms are likely due to minor stomach upset. If your cat is showing other signs of illness, however, she should be seen by your veterinarian.

Causes for concern include:

- repeated vomiting
- blood in vomit
- vomiting and diarrhea together
- frequent hairballs
- dry heaving
- lethargy
- poor appetite
- drooling
- distended abdomen

Vomiting is considered a nonspecific sign of a possible illness, meaning that it can occur with a wide range of illnesses and conditions. A cat experiencing frequent vomiting could be suffering from a systemic illness such as chronic kidney disease, may have eaten something that she shouldn't have, or may potentially have a blockage in her gastrointestinal tract. Other potential causes of vomiting include cancer, food intolerance, internal parasites, hyperthyroidism . . . you get the idea.

Hairballs can become problematic if they get lodged somewhere in your cat's digestive tract and cause an obstruction. Thankfully, these situations are rare.

### **Getting a Diagnosis**

To get a handle on what is causing your cat to vomit or produce hairballs excessively, your cat needs a physical exam and blood work. Your veterinarian will palpate your cat's abdomen to feel for obstructions, tumors, abdominal discomfort, and any other physical abnormalities. The blood work provides information on how internal organs are functioning.

Your veterinarian will need a detailed history from you on how often your cat pukes up nasty things on the floor, what the vomitus looks like, and if there are any patterns to when episodes occur (for example, if your cat routinely vomits after eating a meal or if she has an uptick in hairball frequency after stays at the boarding kennel).

All this basic information will help to direct your veterinarian to a potential cause for the issue and direct further diagnostics, which may include imaging such as abdominal radiographs and/or ultrasound.

#### In a Nutshell

Periodic hairballs once every week or two and isolated episodes of vomiting are not a cause for concern unless your cat is showing other signs of illness or discomfort. If your cat vomits repeatedly or is showing other symptoms, she should be seen by a veterinarian.

# **Vomiting vs. Regurgitation**

Vomiting is the active expulsion of stomach contents. Your cat's abdomen will contract strongly, and it may be accompanied by some disgusting retching sounds.

Regurgitation is a mostly passive process during which food or fluid comes up from the esophagus. There is usually little preamble to regurgitation, no abdominal contractions, and your cat may be as surprised as you are.

# Can I Give My Cat CBD Oil?

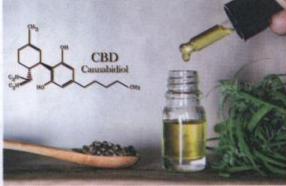
Information about CBD is evolving

I have been reading about the use of CBD oil for problems in people, and I have a 12-year-old cat that doesn't eat very well and has arthritis that appears to be causing him some discomfort. I know that CBD has been used for pain control in people. Is this something that I can consider treating my cat with?

Thanks for getting in touch and for your reasonable inquiry. We get many questions about cannabidiol (CBD) use in cats. Perhaps a few points about what it is, what we know about it, and what the future may hold for its application in cats would be helpful to you.

CBD is a one of the hundreds of compounds found in the cannabis plant, some of which cause psychoactive effects (i.e., a "high"). CBD itself, though, has not been shown to exhibit these effects in people or in animals, and there is currently no evidence that either people or animals can become addicted to it.

While research is ongoing and necessary to better define the risk and benefits of CBD therapy in both people and animals, it has been shown to possess a broad range of potentially beneficial effects in a number of studies, including anxiety reduction, antimicrobial properties, antineoplastic (anticancer)



While CBD oil appears safe for cats, appropriate dosing has not been properly determined.

properties, antinausea effects, antiseizure activity, and pain control.

As with any potential therapy, it is important to reiterate that any potential benefits of CBD therapy must be weighed against the risks of its use, and while the risks of CBD therapy seem to be relatively manageable based upon studies carried out thus far, this issue must be addressed via further study.

It is also important to note that demonstration of benefits in one species does not guarantee a similar benefit in another species. Cats are quite unique from a metabolic/physiologic standpoint, and there are many examples of therapies that are safe and effective in other species that are not in cats.

It is important to keep this in mind when reading about CBD research in non-feline species.

The transition from the

demonstration of potential benefit in a laboratory to its use in whole animals (rather than in cells in a culture dish, for example) requires studies in the species of interest to first demonstrate safety and then show efficacy.

If a potential therapy is shown to be unsafe in a species, it is rarely pursed further in that species. If it is shown to be safe, then effectiveness must be demonstrated, ideally using placebo controlled, blinded studies in patients with the naturally occurring disease for which the therapy is being investigated.

Based upon studies carried out thus far, CBD appears to be relatively safe in cats, provided that appropriate dosing (which is still being worked out) is utilized. The efficacy of CBD for treating any feline disease is thus far lacking, however, so we cannot recommend its use until such a benefit has been demonstrated in controlled studies. Finally, as our nation and individual states work out legalities surrounding its distribution, CBD usually cannot be prescribed by your veterinarian.

We are carefully monitoring the literature for studies addressing the issue of CBD use in cats and will certainly inform the public of any news on this front as it becomes available.

### HAPPENING NOW...

This column is written Domestic Violence Funds-PetSmart by Bruce Kornreich, Charities has awarded a \$260,000 grant to Urban Resource Institute, an American provider of domestic violence residential services, according to Veterinary Practice News. The money will be used to conduct a research survey to evaluate the situation of survivors and pets and the efficacy of the co-living model in domestic violence shelter settings.

> Big Investment—Hill's Pet Nutrition plans to spend over \$250 million for a new factory in their home state of Kansas. This will be the company's fifth plant, according to to Petfood Industry News.

Cat Series-According to TV Insider, NetFlix is planning a six-part documentary called "Cat People." Creator Glen Zipper dispels negative notions of feline enthusiasts as "crazy" or "antisocial." Instead, the folks you meet are living their best lives thanks to their buddies with nine lives.

> Cowpox Infection—Live Science reports that a U.K. woman developed a severe eye infection due to cowpox, a cousin of smallpox, which she contracted from her cat. Cats can become infected with cowpox through contact with rodents, but cat-tohuman transmission of the disease is rare.



DVM, PhD, DACVIM, Director of the Cornell Feline Health Center and Editor-in-Chief of CatWatch. You can write to Dr. Kornreich at catwatcheditor@ cornell.edu or

CatWatch, 535 Connecticut Ave., Norwalk, CT 06854. We welcome digital photos to consider for use with your question.

### Coming Up ...

- Learn About Vestibular Disease
- Understanding the Cat-Human Bond
- ▶ The Dormant Stage of FIV
- Knowing When to Call the Veterinarian

