



CatWatch

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



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IN THE NEWS ...

Shelter Help Desk Reduces Admissions

When behavior problems seem insurmountable, many owners surrender their pets to shelters. The Nevada Humane Society in Reno lowered admissions by 8 percent with one simple change: It created the Animal Help Desk, a free phone service.

"We see it as part of our mission to encourage and enable people to do right by their animals by helping them keep their pets in their homes whenever possible," Executive Director Bonney Brown says in the e-newsletter No-Kill Nation from Maddie's Fund.

In one two-week period, 60 percent of owners were persuaded to try alternatives to surrender. They include behavior modification, training, environmental changes, health care information and finding a new home for the pet themselves. "In many cases all the caller needs is information and moral support," Brown says. ♦

Slowing Feline Cognitive Decline

Mental and physical exercise and antioxidant supplements can often improve the quality of life for both owner and cat

Advances in veterinary medicine are keeping our cats alive longer, giving us precious extra years to spend with them. Sadly, extended life-spans also bring geriatric disorders such as feline cognitive dysfunction (FCD), similar to human Alzheimer's in its symptoms.

Like Alzheimer's, FCD has no cure. And far fewer studies have been done on the feline version of



First rule out medical conditions.

the disease than have been done on the canine variety, so there are no approved medical treatments. But antioxidant supplements, along with mental and physical exercise, often improve the quality of life for both owners and cats.

No Pre-Mortem

Tests. Before any regimen is instituted, a thorough veterinary exam is essential. "No pre-mortem tests exist to determine whether a cat has the disease," says

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Robo-Tuffy Provides Hands-on Training

Veterinary students can practice emergency skills on the robotic cat and learn from their mistakes

Students honing their emergency skills at the Cornell University College of Veterinary Medicine owe gratitude to a special feline named Fluffy, who doesn't meow and never needs a litter box.

Fluffy is a robotic cat equipped with a mechanical pulse and heart, artificial lungs and electronic hardware and software capable of simulating cardiac arrest, lung diseases, shock and other medical conditions. She and a canine version named Jerry are believed to be the first of their kind used in veterinary schools.

Think of Fluffy as a high-tech pet version of the popular battery-operated

board game Operation, which tests players' hand-eye coordination and motor skills. Jerry and Fluffy are proving to be confidence builders for second- and third-year students aspiring to become veterinarians.

A Teaching Bridge. "In the classroom, some students can rattle off what to do for various medical situations, but in the clinic, they may freeze and have trouble remembering what to do," says Daniel J. Fletcher, DVM, Ph.D., Assistant Professor of Emergency and Critical Care. "Our

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CatWatch

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SHORT TAKES

Survey Finds Cats Heavier Than Ever

Obesity among pets in the U.S. continued to climb in 2012, with the number of overweight cats reaching an all-time high. Veterinarians reported that 58.3 percent of their feline patients — up from 55 percent over the previous year — were overweight or obese in the sixth annual survey by the Association for Pet Obesity Prevention (APOP). Given the cat population of 74.1 million in this country, that equals about 43.2 million cats, the association says.

Surprisingly, the survey also revealed a “fat gap,” according to APOP founder Ernie Ward, DVM. When veterinarians asked owners to describe their fat cats’ body condition as too thin, normal, overweight or obese, 45.3 percent said normal.

“The disconnect between reality and what a pet parent thinks is obese makes having a conversation with their veterinarian more challenging,” Dr. Ward says. “Many pet owners are shocked when their veterinarian informs them their pet needs to lose weight. They just don’t see it.”

Yet obesity remains the leading health threat to our nation’s pets, Dr. Ward says, adding that it’s the No. 1 preventable medical condition seen in veterinary hospitals. “The most important decision a pet owner makes each day is what they choose to feed their pet.” Health risks include type 2 diabetes, joint problems and hypertension.

The survey, conducted in October and December, gathered data from 121 veterinary clinics in 36 states and assessed 450 cats. The APOP is an organization of veterinarians and health care professionals who are unaffiliated with the veterinary industry.



A disconnect: While 58.3 percent of cats were found to be overweight, 45.3 percent of owners described them as normal.

Cat Food Recall

Diamond Pet Foods has voluntarily recalled certain bags of cat food because they may have low levels of thiamine, also known as vitamin B1. No complaints were received about the levels or health problems related to the products, which were distributed in 25 states, the company said.

The foods, which have specific sell-by dates and codes, include Premium Edge Finicky Adult Cat Formula, Premium Edge Senior Cat Hairball Management Formula, Premium Edge Kitten Formula, Diamond Naturals Kitten Formula and 4health All Life Stages Cat Formula.

“We have a process where we continuously test our products, and this process allowed us to find the undesired levels of thiamine in some of our cat formulas,” says Michele Evans, Ph.D., Executive Director of Food Safety and Quality Assurance at Diamond Pet Foods.

“Cats fed product with [certain] production codes and best-by dates exclusively for several weeks may be at risk for developing a thiamine deficiency,” the company says. Signs in cats can be gastrointestinal or neurological, such as incoordination, tilting of the head and seizures.

Owners seeking more information, a refund or replacement product may call the Pet Food Information Center at 888-965-6131 or visit www.petfoodinformationcenter.com. ♦

The Biggest Mistake in Giving Treats

It's failing to count their calories — giving a slice of cheese, for example, is equivalent to your eating seven slices

Treats provide welcome rewards for good behavior, but their overly generous use can contribute to obesity. One reason is that owners don't count treats as calories. "But the bigger problem is a multiple-person household in which every time someone walks by, they give the cat a treat," says Joseph Wakshlag, DVM, Ph.D., Associate Professor of Nutrition at the Cornell University College of Veterinary Medicine.

"Then they think, 'Wow, we went through treats pretty quick. Let's get another bag.' The solution is to put a certain number of treats in a container every day, and then don't refill it until the next morning."

Dr. Wakshlag gives the skinny on cat treats and more in this Q & A.

Q: Do all treats always need to be nutritionally sound or can cats have junk food once in a while?

A: A little bit of junk food is good for the soul, but treats should account for no more than 10 percent of daily calories.

There are plenty of treats out there, and some are nutritionally sound.

Q: How can an owner figure out what 10 percent of their cat's daily caloric intake is?

A: Usually manufacturers have calories listed on the side of the bag.

Q: Are organic treats preferable?

A: Because they tend to be smaller, organic treats are a bit more nutrient dense, but there is no proof that organic does anything for you except cost more. Organic is more about exposure to pesticides than nutrition.

Q: What fat percentage is acceptable for cat treats?

A: Stick with the calorie percentage rather than the fat. The higher the fat, the higher the calories.

Q: Are there any ingredients to avoid?

A: Yes. Raisins, grapes, avocado, onions and garlic should be avoided. It's the table foods people don't think about.



Cats may love them, but treats should make up no more than 10 percent of daily calories.

Let's say you give your cat a slice of cheese with a pill. For him, that slice of cheese is equal to your eating seven of them. When you have to give medicine to a cat, veterinarians look for something that can be given once or twice a day at most because cats can be difficult to pill. I have not checked the calories in Greenie's Pill Pockets, but it's the same principle and they are better for your cat than a slice of cheese.

Q: What, if any, cat treats should be avoided?

A: Bones can cause dental problems, as they can fracture teeth. Some fish should be avoided, in particular the long-lived fish, such as tuna, ahi, shark, mahi mahi and king mackerel. The long-lived fish are more likely to have more mercury and polychlorinated biphenyls, or PCBs. Short-lived fish like salmon, cod, halibut and jack mackerel have less PCBs and mercury. Catfish are OK. Farm-raised fish are OK, as they don't tend to have all those [additives].

(continued on page 4)

CHECK OUT CALORIES WITH THE MANUFACTURERS

Pet treats are a \$2.3-billion-a-year industry in the U.S., with production ranging from manufacturers employing thousands around the globe to neighborhood mom and pop bakeries. The list below is a small sampling of companies marketing pet treats. Their websites have information about ingredients and contacts for consumer affairs to check on calorie counts if they're not on the product label:

- ◆ canidae.com
- ◆ delmontefoods.com
- ◆ pedigree.com
- ◆ pg.com (Procter & Gamble includes Iams among its brands.)
- ◆ mars.com
- ◆ milkbone.com
- ◆ nestle.com (Includes Purina among its brands.)

Why Do They ... Chase Lasers Beams?

It's normal predatory behavior but may result in frustration

This occasional series explores the reasons for cats' often intriguing behavior. If you would like to suggest a topic, please write CatWatch Editor, 800 Connecticut Ave., Norwalk, CT 06854, or email catwatcheditor@cornell.edu.

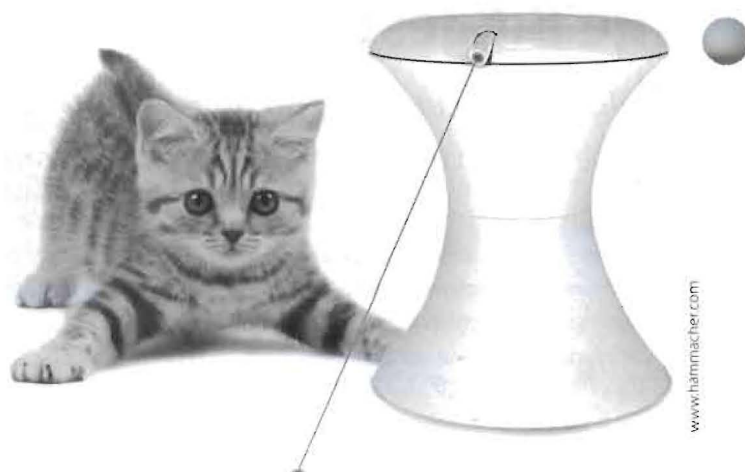
Cats love to chase lasers' points of light, twirling, leaping, pouncing. They engage in the behavior with gleeful abandon for one simple reason: "The jumpy, erratic movement of the light beam can stimulate predatory-like play behavior," says Pamela Perry, DVM, Ph.D., a lecturer in animal behavior at the Cornell University College of Veterinary Medicine.

However, owners should recognize that, as much as their cat seems to enjoy the instinctive activity of being on the hunt — and the exercise can indeed be beneficial — it's not without several risks, Dr. Perry says. "The pursuit is perpetuated by the inability of the cat to catch the light. This can potentially result in frustration. With repeated exposures,

there is concern that cats may become fixated on the light and develop a compulsive disorder. Although this happens fairly frequently in dogs, it does not seem to happen to cats."

Limited Sensory Effect. With normal predatory behavior, the cat engages all the senses — smell, sight, touch and sound, Dr. Perry says. "With a laser light, however, only the visual sense is utilized. In addition, the erratic hand gestures of a human hardly mimic the movement of prey."

She recommends interactive toys that can be captured and engage more of the cat's senses, such as a small fishing pole



A battery operated laser oscillates and darts in different directions to engage play.

with a "critter" on the end. "If owners are intent on using a laser light with their cat, I advise that they limit the number and duration of bouts of play and end each session by engaging the cat with a toy that he can capture to prevent frustration."

A final caveat: Laser lights should never be shone directly at the cat's eyes because of potential damage to the retina, the light-sensitive layer of tissue at the back of the eye, Dr. Perry says. "An alternative is to use sunlight reflected from a watch to 'dance' the light around the room." ♦

NUTRITION

TREATS ... (continued from page 3)

Q: Is it OK to give cats vegetables if they will eat them?

A: Cats will eat them sometimes. You can give them 2 ounces, or 60 grams, and they get 20 calories. Cut it the size of kibble and put it in the bowl. For whatever reason, some cats like zucchini.

Q: Should vegetables be steamed because of cats' shorter gastrointestinal tracts or is raw OK?

A: We should cook vegetables to some degree to liberate the nutritional density. Raw vegetables don't have any

advantage except that they aren't quite as calorie dense. Canned or frozen is a great option for weight loss because of the convenience.

Q: What treats do you give your cat?

A: My cat is battling the bulge so I don't give him any treats. He's a pest and anything food is a treat. I have faked him into eating zucchini.

Q: Should fiber content be a consideration for every cat or only those with constipation issues?

A: The feed industry is going in the right direction by adding fiber, but it's really a small step.

Q: Is there any nutritional benefit to premium treats compared to those you would buy at the grocery store?

A: My opinion is if you're looking for health benefits, give vegetables and a little bit of apple.

Q: Is it better to make homemade treats?

A: I don't think so, other than feeling good about doing something nice for your cat.

Q: Are dental treats a good idea?

A: One of the major benefits of treats is that you can use them for dental purposes. It's really to help teeth. You feel great that your cat loves it and it helps them. ♦

ROBOT ... (continued from cover)

robo-dog and cat give students the opportunity to practice, learn from their mistakes. This type of teaching is a bridge between classroom learning and treating patients in the clinic."

Credit Dr. Fletcher for their creation. In addition to a degree in veterinary medicine, he has a doctorate in biological engineering and background in electrical engineering. His first robotic pet was constructed using parts from a human patient simulator in 2009. He's now working on a new generation simulator being built from scratch that will ultimately be shared with other veterinary and technical schools. Funding for the project has come from a variety of sources from inside and outside Cornell.

Computerized Organs. From Fluffy's outward appearance, she looks like a huggable stuffed cat toy. But inside are computerized organs and connections Dr. Fletcher controls to simulate the breaths and heartbeats of a real cat. He can manipulate the controls to change Fluffy from a healthy cat to one needing immediate care.

While students spay and neuter healthy shelter animals under the supervision of their professors, Fluffy allows them to face the challenge of quickly diagnosing and taking appropriate action when an animal is having a medical emergency and minutes count. They learn how to perform cardiopulmonary resuscitation and treat shock and other serious, sudden illnesses.

Enio Sanmarti, a third-year veterinary student from Caracas, Venezuela, appreciates the benefits of practicing on a robotic pet. "I was privileged to work on an abdomen emergency case on the robotic pet," he says. "I did everything from start to finish, from assessing vital signs to extracting blood from the abdomen. This is an incredible learning experience because it allows us to work as a team under stress and try to save a pet's life."



Daniel J. Fletcher, DVM, Ph.D., a specialist in emergency and critical care, and Robo-Fluffy bridge the gap between classroom learning and treating live patients.

Robo-Fluffy and Robo-Jerry are at home in the new robotic simulation center on campus. It features fully equipped exam rooms and two rooms for video observation by other students. The center also has defibrillators, medical supplies, a full crash cart and other equipment students need to check vital signs, practice inserting catheters and hook up monitoring devices — all necessary skills when they begin their veterinary practices.

"These robotic pets give students the opportunity to practice in real time and to discuss what went well and what didn't go well," says Dr. Fletcher. "Mistakes prove to be great ways to learn. I've heard students say, 'I'm never going to do that again,' and you can see that they are emotionally invested and committed."

Welcome Butch. He gives demonstrations using the robotic pair at veterinary conferences around the world. "People are uniformly inter-

ested in this type of learning," says Dr. Fletcher, who has unveiled a third-generation robotic dog named Butch.

"Butch has joints that move like a real dog and a clam-shell chest to insert electronics and a better capability for catheter insertion," he says. "The first prototype of Butch is definitely a step up from Jerry. He has a more realistic airway and a more realistic feel."

Word of Cornell's robotic pets is sparking interest at other veterinary schools and is paving the way for a new way of learning. "Using robotic simulation is a new model of teaching, of problem solving," Dr. Fletcher says. "We can provide an environment where students can learn from their mistakes without causing harm. If those mistakes cost Fluffy her virtual life, a quick press of a button brings her back to life to teach those students the correct approach, so that when they're faced with a flesh-and-blood patient in the clinic, they have the skills and confidence to save the real lives." ♦

FCD ... (continued from cover)

Katherine A. Houpt, VMD, Ph.D., former president of the American College of Veterinary Behaviorists and emeritus James Law Professor of Animal Behavior at the Cornell University College of Veterinary Medicine. "It's important to rule out other medical conditions that may cause similar symptoms." (Please see sidebar.)

Post-mortem examinations have shown beta-amyloid (a type of protein) plaques in the brains of senior cats with FCD, similar to those in the brains of Alzheimer's patients. The plaques destroy brain cells, particularly in areas associated with memory and learning. Some common symptoms include:

◆ **Activity changes:** Cats with FCD may be less active and play less. That means owners often end up with pets who mostly sit in their lap and purr. Dr. Houpt hypothesizes that this is one reason FCD may be under diagnosed. "I think people like their old

cats better than they did younger cats — until they begin to keep their owners up at night."

- ◆ **Disorientation:** Your cat may seem confused by his surroundings or stare blankly into space or at walls.
- ◆ **Interaction changes:** A formerly affectionate cat may be withdrawn, both with humans and other felines. This sign may be difficult to identify in a cat who was already somewhat remote. Indeed, Dr. Houpt points out, it's easy to miss interaction changes with cats in general: "How often does a cat come when called? Cats do like to play well into their teens, so you might see a difference there, but only a few cats will have a game of fetch, so a change in interactions with humans is a bit harder to detect."
- ◆ **Sleep-wake cycle disruption:** The ability to distinguish between night and day may be lost. Your cat may sleep more during the day and be wakeful at night, walking around the house and yowling. This symptom is the



Anecdotal evidence suggests that some cats show improvement on Anipryl, but no formal studies are available.

most distressing to cat owners. "If your cat keeps you up all night, that can be very bad, especially if you have to work the next day," Dr. Houpt says. Confining your cat to a smaller area of the house may alleviate the problem of vocalizations caused by disorientation. If your cat seems to be disturbed when the house is dark and quiet, consider turning on nightlights and leaving a radio on. If none of these remedies is effective, ask your veterinarian about anti-anxiety drugs or sleep aids for your cat.

- ◆ **Urinating and defecating outside the litter box:** Dr. Houpt emphasizes that this is not the same as incontinence, where your cat can't help himself. With FCD, a cat retains bowel and bladder control, but forgets where he needs to exercise it. Increasing the number of litter boxes around the house can be helpful.
- ◆ **Changes in appetite:** Some cats seem to lose interest in food and water, though part of that may be the loss of olfactory and visual acuity. When directed to their bowls, these cats may eat and drink.

It's useful to keep a journal of your cat's behavior over a few weeks to discuss with his veterinarian. An examination can include blood work, urinalysis and possibly X-rays or an MRI to eliminate other possibilities before a diagnosis of FCD is made.

No good data exists on the onset of FCD in cats, but the behavioral signs

HOUSE TRAINING ACCIDENTS COULD BE A SIGN OF ANOTHER MEDICAL CONDITION

Several medical conditions mimic the signs of feline cognitive dysfunction:

- ◆ Age-related kidney failure may cause cats to urinate more frequently, leading some fastidious cats to find places to eliminate other than a soiled litter box.
- ◆ Hearing problems or dizziness resulting from inner ear infections may make a cat appear disoriented.
- ◆ Blindness caused by cataracts or by hypertension leading to retinal detachment can create confusion, especially if the onset is sudden.
- ◆ Night-time vocalizing is relatively common in hyperthyroid cats.
- ◆ Arthritis or degenerative joint disease can cause reduced activity or reluctance to travel to or jump in the litter box.
- ◆ Pain from advancing periodontal disease may result in less interest in food.

According to the Cornell Feline Health Center, many of the signs of cognitive dysfunction may also be traced to a neurologic disorder in the prosencephalon (front part of the brain), which controls everything from vision and hearing to sleeping and eating. Tissue inflammation, tumors, trauma or metabolic diseases may all have an impact on prosencephalon function. An analysis of cerebrospinal fluid and/or an MRI can rule out other conditions that can mimic the symptoms of feline cognitive dysfunction.

The Many Roles of Whiskers

They help with navigation, collect information on objects and prey and can indicate vulnerability

The old-fashioned term “the cat’s whiskers” means the height of perfection. It was popular in the ’20s, along with “the cat’s meow.” Debate ensued regarding the origin of the phrases, but people who used them certainly understood the unique capabilities of your cat’s most sensitive hairs.

Whiskers, which are two to three times thicker than other hair, grow on the eyebrows, chin, cheeks and areas behind the forelegs above the paw. They have long roots embedded in mechanoreceptors in the dermis that provide information about a cat’s environment. These receptors relay messages about a cat’s environment to the central nervous system.

When your cat’s whiskers move back and forth, either when he moves them voluntarily or when the tip of the whisker touches something, the mechanoreceptors detect subtle changes in air currents or vibrations and translate these into messages that indicate prey movement or the location of objects like furniture.

Facial whiskers are well-developed on most predatory species to enhance hunting abilities, and their location determines their function. The whiskers on the muzzle augment navigational skills in restricted spaces or in darkness. They extend to approximately the width of the cat’s body. Aside from aiding in navigation, the whiskers on the forelegs collect information about captured prey. Because cats are farsighted, they often cannot see animals in their clutches. The leg whiskers allow them to estimate size, shape and position of their prey.

Cats can also use their prominent facial whiskers’ position and length of their spread to communicate emotion. If they’re shy or afraid, closely bunched whiskers lying flat against their cheeks make their face appear smaller and less threatening. This look can also mean your cat is angry or feels vulnerable



Whiskers on the muzzle extend to about the width of the body.

and it is commonly seen in cats who are feeding or greeting another cat.

Cats need to sense all stimuli when hunting, playing or walking, so their whiskers will be bristling, fully fanned and bending almost straight forward when they are involved in these activities.

Forcing whiskers into a position counter to their natural alignment causes discomfort and may trigger a swat from a cat with claws fully arrayed.

As with other types of hair, whiskers are shed periodically, but not to worry. Others will grow in. ♦

MEDICINE

FCD ... (continued from page 6)

can be noticeable as early as age 10, with the prevalence of symptoms increasing significantly with age.

The drug Anipryl was approved by the FDA as a treatment for canine cognitive dysfunction and is sometimes effective for dogs, but it hasn’t been approved for feline use. Some veterinarians prescribe it off label — that is, for a use that has not been officially sanctioned — and anecdotal evidence suggests that some cats show improvement on it, but no formal studies are available.

Vitamins and Supplements. Similarly, the specially designed commercial

diets available for dogs don’t exist for cats. A diet was developed and cats on it became more active, Dr. Houpt says but, “Owners are not upset enough about a cat’s behavior to make the diet marketable.” She suggests liver supplements rich in vitamins E, C and other antioxidants, as well as carnitine (a substance that helps the body turn fat into energy), all of which are believed to retard the effects of aging.

Keeping your cat mentally and physically active is another key to slowing the progress of FCD. Dr. Houpt offers several suggestions, such as buying your cat new toys, “perhaps a mechanical mouse or anything that might provide pleasant stimulation.”

Maintaining a healthy weight is necessary at this stage to keep your cat mobile. It’s also helpful to provide ramps and steps to allow him to reach his favorite lounging spots.

While you can’t avoid the inevitable, you can take consolation in the fact that you kept your cat in such good health that he became a senior. And you can continue to do the best you can to maintain a good quality of life for both you and your cat. ♦

For more information, visit the Cornell Feline Health Center, <http://www.vet.cornell.edu/fhc/>.



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.

COMING UP ...

- ❖
- TICKS**
- ❖
- URINARY TRACT
INFECTIONS**
- ❖
- STRANGER
DANGER**
- ❖
- YEAR-ROUND
DISASTER PLANS**
- ❖

Q I have a yellow and white shorthaired male cat, 18 years old. As he got older, he began to have rough black spots on the skin on his ears, mouth and chin area, where fleas hide. What is this and can we help him with this?

Sincerely, Spot's Mom

A First of all, I want to thank and congratulate you for the obvious care that you have provided and concern you have for your baby.

Given his age, you have clearly done something (many things!) right, and today's question is an extension of the dedication that you have shown.

A number of things can cause changes in pigmentation of a cat's skin. Before discussing some potential causes, it's important to stress that it is difficult to know specifically what is causing these changes without examining him, so it is important to have him examined by a veterinarian as the first step. The veterinarian may be capable of diagnosing and addressing the problem, or may refer you to a veterinary dermatologist.

Some processes leading to pigmentary changes in a cat's skin are relatively benign, while others can be a significant concern. Generally, lesions that are raised, oozing, crusting, fluid filled, irregularly shaped, thickened and/or ulcerated are of greater concern.

Hyperpigmentation, or increased melanin in the skin, may be genetically based, acquired or associated with pigmented tumors. Among the more benign causes of hyperpigmentation is lentigo, which is usually seen in young cats, but may advance with age. Lentigo is characterized by flat, pigmented regions ranging in size from 1 to 10 millimeters that appear on the nose, lips, ears, eyelids and even occasionally on the gums and hard palate.

This hyperpigmentation, common in orange cats, is smooth and usually not thickened. Think of this as feline freckles. Lentigo is believed to have a genetic predisposition. Epidermal nevi are a more rare form

of a genetically based hyperpigmentation that may sometimes form in linear tracts. Both lentigo and epidermal nevi are usually cosmetic, with little consequence for the affected kitty, although infection may occur, requiring medical attention.

Feline acne may develop in cats of any age, usually on the chin and lower lip. These lesions are often crusty and raised, and may become secondarily infected, requiring either topical cleaning and/or antibiotics or, in advanced cases, systemic antibiotics to address them.

Sometimes cats with conditions involving inflammation of their skin may develop increased pigment at the sites once it is resolved. In these cases, there is usually a history of prior redness, swelling and/or oozing at the affected sites.

A number of conditions that result in pigmented spots are of greater concern. Among the more common of these is melanoma. This is a cancer of the cells that produce the pigment melanin. Melanomas most commonly occur in cats between 10 and 11 years of age, and are often found on the head and neck. They are usually brown or black and may have variable shapes and range in size from 0.5 to 5 centimeters in diameter. Melanomas may become secondarily ulcerated. They should be treated aggressively by surgical removal with or without supplemental medical therapy, as they can spread and be life threatening. While it doesn't sound like your kitty has melanoma, it is best to make sure and have these spots looked at promptly.

Since you mention that these spots are good places for fleas to hide, it is very important to treat any flea infestation that your kitty may have. Fleas can make us kitties very uncomfortable, result in secondary skin infections and allergies and even transmit intestinal parasites to us. Successful treatment usually involves treating your kitty and the home. Please discuss this with your cat's veterinarian, and you and your kitty will be glad that you did. ❖

—Sincerely, Elizabeth

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