



# Kitten Wellness



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Congratulations! The decision to adopt a kitten is a fun filled, exciting, and challenging time for you! At Pet Care Veterinary Hospital, we are thrilled to share in your joy and will assist you in making sure that your little one gets off on the right paw!

It is essential that your kitten have several examinations within the first year of its life. Examinations will address many different areas to make sure that the health of your kitten is excellent. During these examinations we will discuss such issues as micro-chipping, spaying/neutering, blood work, behavior and nutrition and can even recommend training options. Also, we will discuss the first year examination schedule based on your kitten's first exam.

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## Kitten Wellness Chart

### 8 Weeks of Age



Weight \_\_\_\_\_

- Wellness examination
- Leukemia/FIV test
- Rhinotracheitis, Calicivirus, and Panleukopenia vaccination
- Stool sample – intestinal parasite check
- Nutritional recommendations
- Heartworm prevention and flea/tick prevention using Revolution
- Nail trimming
- Discuss litter box training

### 11 Weeks of Age



Weight \_\_\_\_\_

- Wellness examination
- Rhinotracheitis, Calicivirus, and Panleukopenia 3 week vaccine booster
- FeLV vaccine #1
- Stool sample – intestinal parasite check
- Heartworm and flea/tick prevention using Revolution
- Discuss dental care
- Recommendations on grooming

### 14 Weeks of Age



Weight \_\_\_\_\_

- Wellness examination
- Rhinotracheitis, Calicivirus, and Panleukopenia 1 year vaccination booster
- FeLV vaccine #2 (leukemia booster)
- Discuss spay/neuter (to be done at 4 – 6 months of age)
- Discuss microchipping
- Pre-operation bloodwork
- Heartworm and flea/tick prevention monthly using Revolution
- Rabies vaccination

## Every 12 Months



Weight \_\_\_\_\_

- Wellness examination
- Check for intestinal parasites with a stool sample
- FeLV/FIV test if cat goes outdoors
- Heartworm prevention once per month year-round
- Dental health care
- Nutrition recommendations
- Vaccinations:
  1. Rhinotracheitis, Calicivirus, Panleukopenia (after the first year, then every 3 years thereafter)
  2. Rabies (the first vaccine is for 1 year; thereafter, every 3 years in the state of Virginia. State regulations vary)
  3. +/- Leukemia (every year if cat is at risk)
  4. Annual FeLV/FIV testing if cat is at risk



Between nine and twelve weeks of age, kittens lose the disease protection they received from their mothers and develop the ability to form their own immunity. It is important to have your kitten vaccinated to help prevent infection and to keep him/her healthy.

### Vaccination Recommendations for Cats

Vaccination	Clinical Signs	Info	Vaccine is given:
<b>Panleukopenia</b> (feline distemper)	Fever, vomiting, diarrhea, compromised immune system	Highly contagious among unvaccinated cats	See below
<b>Rhinotracheitis</b> (upper respiratory virus)	Fever, sneezing, eye discharge, mouth ulcers and decreased appetite	Very common, especially in areas where there are a lot of cats (example: animal shelters)	See below
<b>Calicivirus</b> (upper respiratory virus)	Sneezing, fever, eye discharge, mouth ulcers and decreased appetite	Very common, especially in areas where there are a lot of cats (example: animal shelters)	See below
<p>The above three vaccines are grouped together as FVRCP. The vaccine series begins at 8 weeks of age, again at 11 weeks of age and finally, at 14 weeks of age.</p>			
<b>Feline Leukemia Virus</b>	Signs are varied, and may include: sneezing, coughing, vomiting, diarrhea, recurrent fevers, anemia and non-healing wounds	Found mainly in saliva. Spread from cat to cat by grooming, sneezing, biting and sharing bowls	Given at 11 and 14 weeks; repeated annually if cat is at risk

<p style="text-align: center;"><b>Rabies</b></p>	<p style="text-align: center;"><b>Fever, vomiting, diarrhea, anorexia, neurological signs (possibly)</b></p>	<p style="text-align: center;"><b>Fatal virus that affects the nervous system. Vaccination is required by law after 16 weeks of age. <b>Zoonotic</b></b></p>	<p style="text-align: center;"><b>After 12 weeks of age</b></p>
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After your kitten's vaccine series is complete, annual physical examinations and a vaccine program individualized for your cat will be discussed. Our goal is to provide the best life-long care for your furry friend!

It's important that you bring your cat to us for a checkup at least once a year, even if your kitty seems to be healthy at the time. During these annual checkups, we will give your feline a thorough physical exam, which will include:

- examining his/her body from nose to tail
- weight
- temperature
- listening to his/her heart and lungs
- checking for abnormal discharges from his/her eyes, ears and nose
- checking the teeth and gums
- inspecting for parasites and abscesses
- testing a stool sample for parasites
- administering any needed vaccinations based on physical exam and lifestyle

## **What is Feline Leukemia Virus?**

The feline leukemia virus (FELV) is a highly contagious virus found mainly in a cat's saliva. It is spread from cat to cat by grooming, sneezing, and biting. Bowls and litter boxes used by multiple cats can also become a source of infection.

A blood test can be performed to determine if a cat has the virus. A positive test means that the cat has been exposed to FELV.

If the cat is healthy and tests positive:

- there is a 40% chance it will reject the virus and recover
- there is a 30% chance of developing a persistent infection and becoming a healthy carrier
- or a 30% chance of becoming ill and dying within 12-24 months

Cats persistently infected with FELV rarely live more than three years, and most die of associated diseases before cancers develop.

FeLV can cause:

- Weight loss
- Fever
- Immunodeficiency and infections
- Anemia
- Immune-mediated diseases
- Reproductive problems
- Gastrointestinal disease
- Neurologic disease
- Platelet disorders
- Lymphadenopathy (enlarged lymph nodes)
- Cancer
- Respiratory and eye problems
- Oral disease

The clinical signs of the disease are going to vary because so many body systems can be affected. Loss of appetite, fever, weight loss, and weakness are the first signs most commonly seen in infected cats.

A feline leukemia vaccine is available and is recommended for all kittens. Cats should be tested for FELV prior to vaccination and the test should be repeated yearly if the cat goes outside. First time vaccination requires two doses given three weeks apart. After that, a vaccine booster each year is recommended.

## What is Feline Immunodeficiency Virus (FIV)?

Feline immunodeficiency virus (FIV), an infectious disease in domestic cats, is similar to human immunodeficiency virus (HIV infection) in humans. It attacks and weakens the body's immune system, making the animal susceptible to infections and diseases that don't usually affect healthy cats.

FIV is species specific, which means it can only be transmitted from cat to cat, and not to humans or other animals.

### **Risk factors:**

- Age - FIV is more common in older cats
- Aggression - Aggressive male cats that roam and fight with other cats are more likely to be infected than females and nonaggressive males
- Illness
- Time spent outdoors



- Free-roaming outdoor cats are more likely to be infected than indoor cats.

### How is it transmitted to my cat?

FIV is transmitted primarily through deep, penetrating bite wounds. **In some cases**, a mother cat can transmit the virus to her newborn kittens during gestation, as the kittens pass through the birth canal, or through nursing. Although these kittens may test positive for FIV for several months after birth, **most** will not become infected. Positive test results in a kitten younger than 6 months of age should be repeated (about every 2 months) until the kitten is at least 6 months old. FIV can also be transmitted through the transfusion of contaminated blood.

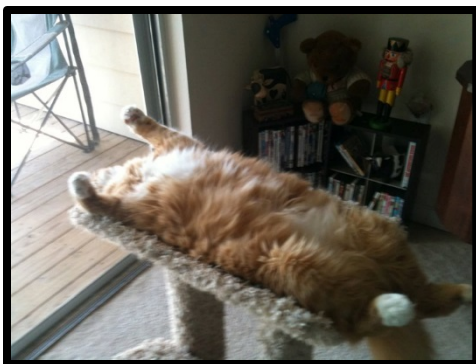
### Clinical Signs:

- Fever
- Enlarged lymph nodes
- Inflammation of the gums
- Chronic diarrhea
- Chronic skin infections

### Treatment for FIV

There is no cure for FIV. Since most FIV-infected cats die from secondary infections, one of the best things you can do is to take measures to prevent secondary infections. You should protect a FIV-positive cat from exposure to infectious agents (i.e., bacteria, parasites) and by keeping the cat away from other cats, indoors, and vaccinated against other viral diseases.

### Prevention of FIV



We recommend testing your kitten on his/her initial visit with the test being repeated yearly, especially if your cat goes outdoors.

Other ways to help prevent transmission of FIV include:

- Neuter male cats. Neutered males are less aggressive and free roaming than non-neutered males, and their risk of contracting FIV is lower.
- Keep cats indoors
- Report stray cats to the local animal shelter or animal control agency
- A vaccine is available but currently not recommended



## The 411 on **Parasites**

Most kittens are born with intestinal worms or acquire them soon after birth by walking in areas where infected animals have gone to the bathroom.

We will test a stool sample every time your kitten comes in. This is how we can find out whether your kitten is infected or not. Vomiting, diarrhea and a pot-bellied appearance can indicate the presence of worms.

### **Roundworms**

- Cause diarrhea, vomiting
- Seen occasionally in vomit or stool
- **Zoonotic**: can be transmitted to humans

### **Hookworms**

- Left untreated, can result in potentially life-threatening blood loss, weakness and malnutrition
- **Zoonotic**: can be transmitted to humans. 1-3 million people are infected with hookworms by their pets **every** year

### **Tapeworms**

- Caused by kitten swallowing a flea that is carrying a tapeworm egg
- Tapeworms may be seen in the stool as small, ivory colored rice-like segments

### **Giardia**

- Causes sudden, strong smelling diarrhea
- Source: contaminated water (streams, ponds, lakes)
- **Zoonotic**: can be transmitted to humans

### **Heartworm**

- Transmitted through mosquito bite
- Most cats show no symptoms; however symptoms shown may include: coughing, wheezing, lethargy, weight loss, not eating, vomiting
- Heartworm preventative (Revolution) should be applied to the skin monthly and continued year round in the Hampton Roads area

### **Coccidia**

- Destroys the intestinal lining
- Can cause diarrhea

### **External Parasites: Fleas**

- Live on the skin and feed on the cat's blood
- Can cause skin irritation, inflammation and deadly anemia if present in large enough numbers
- Products used to control them: we carry Capstar and Revolution

## **Zoonotic** – What Is It? Should I Worry?

Some parasites are zoonotic, meaning that they can infect people as well as animals. Some humans are more at risk than others:

- Infants/small children - immature immune systems, poor hygiene - hands in mouth, etc.
- Pregnant women - immune systems are more susceptible and there are additional fetal hazards
- Elderly - immune systems may be impaired
- People with compromised immune systems - undergoing cancer therapy, HIV/AIDS patients, etc.

### **How can I become infected?**

**Roundworms:** oral contact – not washing your hands after working with litter boxes or working in soil contaminated with dog feces.

**Hookworms:** get into your skin after you have worked in contaminated soil, for example, while gardening or walking barefoot in the yard, at the beach, or in a park.

**Giardia:** oral contact or by drinking water straight from streams or lakes.

For more information, see the **Companion Animal Parasite Council** website at <http://www.capcvet.org/>

Also:

<http://www.petsandparasites.org/cat-owners/index.html>

## **To Have a Healthy Cat.....**

**1. Get Preventive Care** – We have found that the most common health mistake owners make is not getting their cat preventive care. Preventive care is absolutely vital to catching health problems in their early stages.

Although regular vaccinations are an important part of preventive care, they're not the whole picture. Your cat will benefit greatly from having a comprehensive annual exam. This can include:

- An evaluation of your cat's eyes, ears, coat, and skin
- Blood work

- An oral exam
- Parasite control
- Advice about nutrition, exercise, and lifestyle

As a whole, cats generally get less health care than dogs. Reasons include cats being experts at hiding their pain or not enjoying a trip in a carrier to our office. Remember, you might not always see signs of arthritis, tooth issues, or malnutrition in your cat, but we will!

## 2. Spay or Neuter

- Recommended between 4 and 6 months of age
- Better behavior: neutered male cats are more likely to stay at home rather than wander the streets to try to find a female. They are also less likely to urinate throughout your house and yard to mark his territory.
- Disease prevention: owners that spay their females before her first heat can help to prevent diseases like mammary and ovarian cancer and uterine infections all of which are highly fatal in cats. For male cats, neutering before the kitten is six months old can prevent testicular cancer.

## 3. Don't Put Off Coming to See Us

Cats are experts at hiding their illness. It's an instinctive behavior that protects them from predators. Waiting to see if a health problem gets better on its own is not a good idea.

So although you may think a health problem is solved, you could find later on that it's progressed to a full-blown emergency. If you see there's a problem, for example, your cat is limping or is holding her head at an angle – **CALL US - 473-0111**

Other signs of illness:

- Vomiting or diarrhea, both of which can quickly lead to life-threatening dehydration
- Changes in grooming
- Sleeping much more than usual
- Sneezing
- Weight loss
- Changes in urination or defecation
- Lameness
- Panting
- Refusing food or water
- Hiding

#### 4. Don't Skip Parasite Control

**Fleas** are common in cats and do more than just cause the cat to itch. For cats with flea allergies, an infestation can lead to inflammation, severe itching, and hair loss. Kittens can die of anemia if severely infested with fleas. By the way, it takes just **one** swallowed flea to lead to tapeworms.

**Tapeworms** are the most common internal parasite in cats. And, although **heartworms** are often thought of as an issue for dogs, they can also be found in cats. If left untreated, they can lead to irreversible damage to blood vessels, lungs, and heart.

Both indoor and outdoor cats can become infected with heartworms. Signs vary but can include vomiting, coughing, and respiratory problems.

Along with fleas, tapeworms, and heartworms, **ear mites**, **hookworms**, **roundworms**, and **ticks** are also a problem for cats. The key is to regularly give preventive medication and schedule routine check-ups with us. Talk with us to decide the most effective treatment to control the problem parasites in the Hampton Roads area.

#### 5. Microchipping

Did you know that cats are among the 10 million pets lost in the United States every year?

Of the millions of cats that end up in shelters, less than 2% are returned to owners, according to the National Council on Pet Population Study and Policy. Most of the cats that are reunited with their human families had identifying tags, tattoos, or microchips.

Indoor cats periodically escape or are sometimes accidentally let out of the house. Cats are also much more prone than dogs to losing their collars with ID, so microchipping is a much better bet for getting your cat back home.

Microchips are about the size of a grain of rice and take seconds to insert. They are placed under the skin between your pet's shoulder blades and last forever because they don't use a battery. The chip is activated only when a scanner is passed over it.

However, a microchip is only useful if you keep your contact information up to date with the company that made the chip. We will give you all the information you need to keep your pet's registration current!

#### 6. Take Care of Your Cat's Teeth

Dental care is often overlooked in cats and this can easily lead to painful, infected teeth. Gum disease can damage a cat's teeth just as badly as yours, leading to decay and inflammation, as well as bone and tooth loss.

The solution is regular oral exams, teeth cleanings, and daily brushings (yes, it can be done!), as well as high-quality food and chew toys. The toys not only satisfy kitty's desire to chew but massage the gums and remove soft tartar.

## 7. Watch Your Cat's Waistline

Obesity in cats can create health issues such as respiratory problems, diabetes, arthritis, and heart disease. Did you know that just a pound or two may make a difference in your cat's health? It can so it is important for you to watch your cat's diet, make sure he/she gets plenty of exercise and weight. Keep in mind that an average-size cat should weigh between 8 and 10 pounds.

Kittens should be fed a high quality kitten food. Purina ProPlan, Purina ONE, Wellness, EVO and California Natural are brands recommended by us. Failure to feed a high quality diet could result in urinary problems and obesity. Once kittens reach 8-10 months of age, they should be gradually changed to a high quality cat food.

When you buy cat food, look for brands that are labeled “**AAFCO approved and tested**”. Foods so labeled have been balanced following the National Research Council's guidelines and most have been proven in testing. The first ingredient should always be meat (chicken, turkey, lamb, etc.) and not corn, corn meal, or animal by-products.

Do not feed your cat people food. Table scraps can really help your cat pack on the pounds in no time! Also, remember that snacks and treats are for “special” times and not to be free fed. Instead of giving a snack, treat your cat to lots of love and attention.

An excellent website to help you decide what and how to feed your cat:  
<http://www.catinfo.org/>

## Why Won't My Cat Use the Litter box?

- Around 4 weeks of age, kittens begin to play in the litter box
- Litter box use is learned from the mother cat (also known as the “queen”)

### Adult cats have 2 normal postures for urinating:

Squatting and spraying

When spraying:

- tail may quiver (shake)
- urine is sprayed on vertical object
- can be done by males or females, although tomcats (unneutered males) do it more often

## House soiling

- Major complaint among cat owners
- Need detailed history to find out why cat is doing this

### Things to do to help prevent house soiling:

- Do not clean areas with ammonia or ammonia-based products (the smell of ammonia can smell like the ammonia from cat urine)
- If you are using a hooded litter box, take the hood off. Even if you are scooping the litter box on a daily basis, it still can smell like a latrine.
- Replace the litter box yearly (smells can stay in the plastic even when cleaned well!)
- Clean all affected areas with an odor eliminator such as Ceva's URINE-AWAY spray available as Pet Care
- After cleaning, cover the previously soiled area with thick, heavy gauge plastic or plastic carpet protector. Turn the plastic protector over so that the nubby side is facing upwards. This changes the feel of the area for the cat.
- Use multiple litter boxes (at least 1 per cat plus an additional one is recommended with up to 5 boxes total). The litter boxes should be 1 ½ times the length of the cat; a 32 quart plastic storage container works well.
- Scoop litter daily; litter boxes should be totally cleaned every week.
- Cats generally prefer fine, sandy scoopable litter. If you change to a different brand of litter and the cat won't use it, go back to the previous brand used.
- If the cat is seen squatting outside the box, negative reinforcement such as startling the cat with a loud noise, may work if the cat is scared in the first 30 – 60 seconds of the behavior. Don't wait to scare the cat – you want to make him/her aware of what you don't want him/her to do!
- Older cats may want a lower/shorter litter box. You can either use a dog litter box or cut a side off of the box to make it easier for the cat to get in and out.
- Some cats may need to be confined to a restricted area at first. Offer various types of litter to see which one he/she prefers. Pay lots of attention to the cat during its confinement. Once she begins to use the litter box regularly, access to the rest of the house can be expanded.
- Feliway is a feline pheromone (natural product) that helps cats to be calm in their environment. It helps them believe that they have been safe and secure in this area before.

Finally, anti-anxiety medications can be useful in some situations to minimize anxiety associated with house soiling. These medications must be used with litter box tips and behavior modification. The sooner that a cat with house soiling issues is helped, the better the results will be.

## **Feline House Soiling**

Cats show a variety of elimination behaviors, many which are learned as kittens from the queen or mother cat. Around four weeks of age, kittens can be seen playing in and eating their litter or dirt. This is a normal exploratory phase occurring a few days prior to their appropriate use of the litter box. Litter box use is generally regarded as learned by observing the queen's actions.

Adult cats have two normal elimination postures. In most instances, the cat assumes a deep squatting posture, almost a sitting position, over a shallow hole it just dug in soft dirt. The tail extends behind the cat but slightly off the ground. Urine or feces is directed downward. When urination or defecation is complete the cat will stand, turn around, and rake dirt back over the area. It is felt that earth raking, once learned, is evoked by the odor of excreta. A second adult posture is used for spraying urine onto vertical objects. In this case, the cat backs up to the object to be sprayed, extends its tail upward, often quivering it, and slightly extends its rear limbs before urination. Although spraying is used more by tomcats, females and neutered males will also use the behavior if there is a strong territorial threat, usually stimulated by the sight or sound of strange cats in their environment.

House soiling is a major complaint among cat owners and a detailed history of what and when the cat is house soiling is very important in determining the underlying cause. In all cases, there are some facts which owners should know in order to prevent the problem from becoming worse. Do not clean soiled areas with ammonia or ammonia-based products since its residual smell can mimic the ammonia of urine. It is also important to emphasize that because of the cat's keen sense of smell, cleaning will not necessarily eliminate the total urine or feces odor that the cat can detect, but just the part that is objectionable to humans. Another important piece of case history involves the duration of the problem. The longer the house soiling has been going on, the more difficult it will be to correct.

When the problem presents as defecations or squatting urinations outside the litter box, other questions become important.

Did the cat ever use the litter box? If not, success in teaching it to do so is unlikely. Is the cat using the litter box for either defecation or urination but not both? This piece of history will often imply that some form of mild pain may have been associated with a problem elimination such as bladder inflammation or mild, undetected constipation. Cats associate pain with locations and will often move to a new elimination spot, often near the old one.



Was the cat accidentally prevented from getting to the box such as when a door to the bathroom was closed for a few days? The cat may then pick a new spot for elimination and stop using the old one.

If the cat is only soiling a single spot, have the owners move the box to that spot or place a second litter box at the chosen site. Eventually, the new box can be relocated, a few inches per day to a new, more acceptable location.

Is the spot used immediately beside the old box? A box that is too small or shallow may result in urination posturing that can cause the animal to miss the litter. A larger box (such as a 32 quart plastic storage container), or one with higher sides, may stop the problem.

Is the cat not using the litter box for urination or defecation? An unclean litter box can also have this effect. Some cats are so fastidious that any urine or stool is enough to cause them to not use the once-soiled box at all and break training. The litterbox should be scooped daily and totally changed at least every week. The litterbox should be replaced yearly, as the plastic box can hold odors.

Has there been a recent change in the type of litter used? For many animals a sudden change in the type and brand of litter used can cause them to stop using the litter box. Chlorophyll litters have a repelling quality to some cats. Most cats prefer unscented, fine, scoopable litter.

House soiling that involves vertical spraying of areas within the home usually indicates a behavioral frustration associated with a change in the environment, such as the addition of a new cat, dog or person to the household. Problems of this nature are more common in the spring and fall when the tomcat population is most mobile. Ideally it is best to remove the source of frustration; however, this is not always practical and alternatives must be sought. Urine spots near windows or doors generally indicate a problem associated with some type of stimulus coming from the outdoors. Roaming outdoor cats, recent confinement to a section of the house, addition of a new pet; all are examples of “challenges” to the cat’s territory. Since this type of spraying tends to be more seasonal, keeping the cat away from the area where it can see or hear roaming tomcats is often sufficient to stop the problem until the spring breeding season is over.

Spraying type urinations that are not located near doors or windows are usually associated with stresses within the house. The person with a multiple cat household may actually be able to have several animals living in harmony, but when one more is added, spraying starts. An older house cat which has never had to live with other cats may start the problem when a new cat is adopted. This type of social pressure can be countered in several ways. Since “crowding” is a problem with cats, isolation of the newcomer in a room of its own may allow the group to become accustomed to its odor before confrontations are severe. Slowly introduce the new member to the household and keep in mind that another litter box may need to be added, giving all members of the feline household a comfortable place to soil.

When spraying is associated with the belongings and space of one specific person, another type of stress occurs. It is not uncommon for cats to soil that person's bed, backpack or laundry. Have that person feed or positively interact with the animal involved. Negative behaviors like spraying tend to widen the gap between the person and the pet, and that, in turn, tends to complicate the problem.

Feliway has often been helpful with cats that are spraying or not using the litterbox appropriately. It is a natural substance (pheromone) that is present in scent glands that are located in cat's paws and cheeks. It helps cats feel that they have already been in that environment, so there's no need for them to "mark" it again with urine or stool. Feliway comes in both a spray and a plug in diffuser.

Recent research has shown that cats have certain needs within their environment to reduce stress, especially in multi-cat households. These needs have been summarized into an article entitled "The Five Pillars of a Healthy Feline Environment" developed and published by the American Association of Feline Practitioners (<http://www.catvets.com/>).

Lastly, anti-anxiety medications can be useful in some situations to minimize the behavioral "anxieties" that lead to house soiling. These are usually not successful as permanent or sole forms of therapy, but must be incorporated with litter box tips and behavioral modification as outlined above. Keep in mind that time, patience, and diligence all go a long way in controlling this frustrating problem.

Jill D. Partlow, DVM  
August 2014

### **The Five Pillars of a Healthy Feline Environment**

1. **Provide a safe place:** a cat's sense of safety is enhanced by access to isolated or secluded areas where it feels protected from what it perceives to be potential threats. An individualized secure location allows a cat to "avoid and evade" strange smells, noises, or unfamiliar objects, people, or other cats. Examples include: perches, boxes, and enclosures where a cat can conceal itself.
2. **Provide multiple and separated key environmental resources: food, water, litter box areas, scratching areas, play areas, and resting or sleeping areas.** Cats need access to environmental resources without being challenged by other cats. Key environmental resources include feeding, drinking, claw-scratching, playing, and resting areas, and more importantly, toileting sites. Ideally these resources should be available in multiple, physically separate locations. This avoids the stress of competition for resources among cats in multi-cat households.
3. **Provide opportunity for play and predatory behavior:** boredom stresses cats. Hunting provides both play and food for cats. To stimulate cats, offer food balls, puzzle toys (Kong toys), and hide food in various areas of the house. Small plush toys that the cat can attack and carry away are often effective enrichment devices.

- Multiple short periods of play (1-10 minutes) with laser pointers and fishing pole toys also decrease boredom.
4. **Provide positive, consistent and predictable human-cat social interaction:** consistent, gentle and friendly handling of a kitten from a young age establishes a strong human-cat bond. Most cats normally seek out frequent low-intensity interactions, and tend to prefer shorter periods of petting around the face and head. The owner should allow the cat to both initiate and stop interactive behavior.
  5. **Provide an environment that respects the importance of the cat's sense of smell:** olfactory and chemical information is a primary means by which cats evaluate their surroundings and affirm their sense of security and comfort within their core living area. It is important for pet owners or other humans to avoid introducing odors or substances (detergents, medications, laundry or unfamiliar clothing items) that compete or disrupt the cat's sensory perception of its environment.

Taken from the 2013 AAEP/ISFM Environmental Needs Guidelines, *Journal of Feline Medicine and Surgery* (2013) **15**, 219–230,  
<http://jfm.sagepub.com/content/15/3/219.full.pdf+html>

## **Designing an Optimal Litter Box**

### **Litter box number and location**

- At least 1 box per level of house
- Households with 1 cat should have 2 boxes
- At least 1 box per cat plus 1
- If boxes are side-by-side, the cat considers it 1 box
- Avoid placing food and water close to litter box
- Purchase new litter boxes yearly as odor can cling to the plastic of the box

### **Litter box size**

- Rectangle
- 1.5 times the length of the cat (from nose to tailbase)
- Most litter boxes are too small
- Plastic storage boxes: 32 quart is ideal. The lid to the box can be placed upright behind the box to protect the wall.

### **Covered vs. open**

- Open boxes are preferred to facilitate owner monitoring and frequent scooping
- The litter box should allow easy access

### **Litter**

- Not scented (most cats find aromatic litter and deodorizers offensive)
- In most cases, a fine, granular unscented litter is best

- Depth of at least 1.25 inches
- Avoid liners and slotted grills

### **Managing the litter box**

- Remove waste at least once daily and add litter as needed
- Wash litterbox every 2-4 weeks
- Wash with hot soapy water. No strong chemicals and no ammonia based products.

Adapted from the Association of Feline Practitioners 2013 AAFFP/ISFM Environmental Needs Guidelines

<http://www.catvets.com/guidelines/practice-guidelines/environmental-needs-guidelines>

## **A Great Product That Helps Stop Kitty Misbehavior**

Veterinary assistant, Elizabeth, uses it to help control her cat's destructive behavior. When it runs low "Monkey" begins to shred her clothes and go fishing for her goldfish. Dr. Partlow uses it to prevent her young cats from pestering and attacking her feline old timer. So what is "it"?

It is a veterinary product designed to control various behavior problems that cats experience. Feliway is a synthetic copy of the feline facial pheromone, used by cats to mark their territory as safe and secure. The pheromones used are natural substances. They mimic an animal's own pheromones that have a natural calming effect. When a cat feels safe in its environment it rubs its head against the furniture, the corners of walls, or the bottom of curtains, leaving substances (the facial pheromones) that convey a message of calm, well-being and absence of stress. Now you can use Feliway to have the same comforting effect on your pet.

The liquid Feliway comes as a spray or as a plug-in, slow-release diffuser. The spray is used on areas of a room that cats would naturally rub up against such as corners of furniture and doorways and the plug-in diffuser covers 500-650 square feet. The diffusers last about a month and refills can be purchased.

Uses in cats include:

- House soiling misbehavior/urine marking
- Aggression between feline household members
- Destructive behavior including furniture scratching
- Anxiety associated with moving to a new home
- New arrivals and overcrowding
- Travel or visits to the veterinarian (spray in travel carrier)