

Kitten Pack – Introduction



Dear kitten family,

Congratulations on your new kitten! Bringing home a new furry family member is an exciting time for everyone involved. It can also bring new challenges and opportunities. I have put together the following collection of *resources and information addressing common kitten questions and problems*, based on the most recent scientific information on health and behaviour of cats, and with emphasis on basic care, socialization and training. Whether this is your first kitten or your tenth, there are likely at least a few nuggets of information enclosed that will be useful to you. *Starting kittens with a good foundation of training and health care can help avoid prevent more difficult issues down the road.*

Using this resource – there is a lot of information here. The most important information is in the **green** boxes and highlighting, but if you're looking for a particular topic, take a look at the [table of contents](#) and click on hyperlinks.

If you have any questions or want to discuss any of the topics covered in more detail, or if there are additional resources you might find helpful, please don't hesitate to ask.

Sincerely,

Dr. Kayla Bilborrow

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Kitten Pack – Additional Resources

[Basic Training in Cats](#)

[Clicker Training](#)

[Come/Recall](#)

Working with Fearful Cats (pt [1](#), [2](#), [3](#))

[Giving Medications; Pilling Cats](#)

[Owner Health Check](#)

[Sit \(clicker\)](#)

[Stay \(clicker\)](#)

[Target Training/Touch](#)

+ others – just ask!

Kitten Pack – Recommended Reading

- [American Veterinary Society of Animal Behavior Blog](#) is a free-access collection of articles written by some of the continent's most experienced behaviourists, on common behaviour and training topics
- American Veterinary Society of Animal Behavior (AVSAB) [position statements](#) on animal behaviour and training
- [Cat Friendly Homes](#) is an online resource created by feline veterinarians, with a wealth of information on cat care, from kittens to seniors and from health care to behaviour.
- [Decoding Your Cat](#) (American College of Veterinary Behaviorists) on normal dog behaviour and common problem behaviours
- **[Fear Free Happy Homes](#) – a collection of helpful articles and resources on pet behaviour and welfare**
 - [Cat Body Language Course](#)
- [Purr – The Science of Making Your Cat Happy](#) is a must-read book on feline behaviour and cat-human interactions.
- [Train Your Cat](#) – comprehensive online feline training course through Karen Pryor Academy.

For additional resources about specific health and behaviour topics, please ask your veterinarian.

Kitten Pack – Kitten Socialization

What is a Socialization Period?

- Although learning occurs throughout life, a kitten's socialization period is the **most influential learning period** of a cat's life.
- Socialization occurs earlier in kittens than in puppies – ideally, **socialization experiences should start before 9 weeks of age.**
- It is common to bring cats into the household at older than 9 weeks. **Older kittens and adult cats should also be socialized, with a similar process used, but with care to ensure they are not overwhelmed, and feel safe throughout the process.**

Why is socialization important?

- **Poor socialization can affect lifelong behavioural health, and may result in aggression, anxiety and/or fear disorders.** This is VERY common in cats, due to their primarily indoor and isolated lifestyles – but early attention to safe socialization can make a significant difference in your cat's lifelong behavioural health.

Rewarding cats during socialization.

- For kittens, treats should be offered with consideration for volume offered, as it is easy to offer too many. Use treats that break easily into slivers (eg. freeze-dried treats), lickable treats (eg. Churu lickable treats), and vary rewards with some non-food-based reinforcement (playing, petting if your kitten enjoys these things).

Rules of Socialization:

- **Socialization experiences must be SAFE**
 - Socialization experiences should not risk your kitten's health – socialization should occur in clean, disease-free environments with healthy animals and humans. Care should be taken to ensure your kitten cannot wander away or hurt him/herself (eg. keep on harness and monitored outdoors).
 - The goal is for your kitten to enjoy being near to a variety of stimuli – **they do NOT need to interact directly**, particularly if direct interaction compromises your kitten's safety or the safety of others.
- **Socialization experiences must be POSITIVE**
 - Novel experiences should always be paired with **something positive – treats, petting, play, praise.**
 - **Avoid negative experiences.** Monitor for signs your kitten may be fearful or anxious when socializing, and withdraw from the novel stimulus until your kitten is more comfortable and can take treats or engage in play. Only move towards the stimulus if your kitten continues to engage, and is willing to do so.
- **Socialization experiences must be DIVERSE** - See socialization checklist.

Please see also – AVMA's resource on [puppy and kitten socialization](#).

Kitten Pack – Socialization Checklist

Adapted from *Kitten Start Right Socialization Checklist* and *Sophia Yin's Socialization Checklist* for puppies. **ENSURE SAFE SOCIALIZATION!**

How does your kitten respond to each stimulus? **Give them a score /5:**

1. Over-arousal or tries to get at (growl, hiss, bite)
2. Avoid (struggle, hide, move away, won't approach, hesitant to approach)
3. Freeze (holds still but not eating, non-exploratory, moving slowly, acting sleepy when they shouldn't be tired)
4. Calm, Relaxed (explores, playful, focused on food)
5. Calm, Relaxed (explores, playful when NO FOOD)

Environment/Surroundings

- | | | |
|--|--|--|
| <input type="checkbox"/> Veterinary Clinic | <input type="checkbox"/> Hotel | <input type="checkbox"/> Plane |
| <input type="checkbox"/> Training Facility | <input type="checkbox"/> Airport/Train Station | <input type="checkbox"/> Motorbike |
| <input type="checkbox"/> Kennel | <input type="checkbox"/> Urban Intersection | <input type="checkbox"/> Garbage Truck |
| <input type="checkbox"/> Groomer | <input type="checkbox"/> Rural Area/Country | <input type="checkbox"/> Stairwells |
| <input type="checkbox"/> Pet Store | <input type="checkbox"/> Acreage | <input type="checkbox"/> Elevators |
| <input type="checkbox"/> Work/Office | <input type="checkbox"/> Suburbs | <input type="checkbox"/> Elevated Walkways |
| <input type="checkbox"/> Friend/Relative's House | <input type="checkbox"/> Car | <input type="checkbox"/> Parking Garage |
| <input type="checkbox"/> Park/Playground | <input type="checkbox"/> Bus | <input type="checkbox"/> Sidewalk Signs |
| <input type="checkbox"/> Campground | <input type="checkbox"/> Boat | <input type="checkbox"/> Different litter types (clay, paper, soil, etc) |
| | <input type="checkbox"/> Train | |

People/Accessories

- | | | |
|---|--|--|
| <input type="checkbox"/> Infants | <input type="checkbox"/> Security Guard | <input type="checkbox"/> Heavy |
| <input type="checkbox"/> Toddlers | <input type="checkbox"/> Firefighter | <input type="checkbox"/> Varied Hairstyles |
| <input type="checkbox"/> Children | <input type="checkbox"/> Mail Courier | <input type="checkbox"/> Moustache |
| <input type="checkbox"/> Teenagers | <input type="checkbox"/> Sports Uniform (football, baseball, soccer, hockey) | <input type="checkbox"/> Beard |
| <input type="checkbox"/> Adults | <input type="checkbox"/> Limp | <input type="checkbox"/> Sunglasses |
| <input type="checkbox"/> Seniors | <input type="checkbox"/> Cane | <input type="checkbox"/> Varied Hats/Helmets |
| <input type="checkbox"/> Female | <input type="checkbox"/> Crutches | <input type="checkbox"/> Masks |
| <input type="checkbox"/> Male | <input type="checkbox"/> Walker | <input type="checkbox"/> Hoodies |
| <input type="checkbox"/> European | <input type="checkbox"/> Wheelchair | <input type="checkbox"/> Backpacks |
| <input type="checkbox"/> African | <input type="checkbox"/> Jogger | <input type="checkbox"/> Gloves/Mittens |
| <input type="checkbox"/> Middle Eastern | <input type="checkbox"/> Biker | <input type="checkbox"/> Costumes |
| <input type="checkbox"/> Asian | <input type="checkbox"/> Tall | <input type="checkbox"/> Rain Coat/Poncho |
| <input type="checkbox"/> Indigenous | <input type="checkbox"/> Short | <input type="checkbox"/> Winter Coat |
| <input type="checkbox"/> Veterinarian | <input type="checkbox"/> Thin | <input type="checkbox"/> Boots |
| <input type="checkbox"/> Technician | | |
| <input type="checkbox"/> Police | | |

Animals

- | | | |
|--|--|---|
| <input type="checkbox"/> Kittens | <input type="checkbox"/> Cat-Friendly Adult Dogs | <input type="checkbox"/> Rabbits |
| <input type="checkbox"/> Cat-Friendly Adult Cats | <input type="checkbox"/> Parrots | <input type="checkbox"/> Guinea Pigs |
| <input type="checkbox"/> Puppies | <input type="checkbox"/> Ducks, Geese | <input type="checkbox"/> Ferrets |
| | <input type="checkbox"/> Rodents (if pets) | <input type="checkbox"/> Reptiles |
| | | <input type="checkbox"/> Horses/Livestock |

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Experiences/Handling

- | | |
|--|--|
| <input type="checkbox"/> Travel - <30 Minutes
<input type="checkbox"/> Travel - >30 Minutes
<input type="checkbox"/> Veterinary Visit with Vaccinations
<input type="checkbox"/> Visitors - <4 Visitors
<input type="checkbox"/> Visitors - >4 Visitors
<input type="checkbox"/> Checking Ears
<input type="checkbox"/> Examining Mouth/Gums
<input type="checkbox"/> Opening Eyelids
<input type="checkbox"/> Squeezing Feet
<input type="checkbox"/> Handling/Trimming Toenails
<input type="checkbox"/> Pinching Skin
<input type="checkbox"/> Poking Skin with Capped Pen | <input type="checkbox"/> Touching/Squeezing Nose
<input type="checkbox"/> Cradling Kitten on Back
<input type="checkbox"/> Holding Kitten in Lap
<input type="checkbox"/> Holding Kitten Upside Down
<input type="checkbox"/> Belly Rub
<input type="checkbox"/> Hugged
<input type="checkbox"/> Pulling Collar/Harness
<input type="checkbox"/> Grabbing Kitten by Legs, Tail
<input type="checkbox"/> Bathing/Grooming
<input type="checkbox"/> Wiping/Rubbing Body with Towel
<input type="checkbox"/> Putting on Collar
<input type="checkbox"/> Putting on a Harness |
|--|--|

Textures

- | | | |
|--|--|---|
| <input type="checkbox"/> Rough
<input type="checkbox"/> Slick/Slippery
<input type="checkbox"/> Wet
<input type="checkbox"/> Dry
<input type="checkbox"/> Cold
<input type="checkbox"/> Warm
<input type="checkbox"/> Wobbly/Unsteady
<input type="checkbox"/> Sand
<input type="checkbox"/> Mud | <input type="checkbox"/> Soil
<input type="checkbox"/> Grass
<input type="checkbox"/> Gravel
<input type="checkbox"/> Concrete
<input type="checkbox"/> Asphalt
<input type="checkbox"/> Water Puddles
<input type="checkbox"/> Snow
<input type="checkbox"/> Ice
<input type="checkbox"/> Metal Grating | <input type="checkbox"/> Carpet
<input type="checkbox"/> Wood
<input type="checkbox"/> Ceramic
<input type="checkbox"/> Rubber
<input type="checkbox"/> Turf
<input type="checkbox"/> Stairs
<input type="checkbox"/> Scratching posts
(bark, cardboard, string) |
|--|--|---|

Sounds

- | | | |
|---|---|--|
| <input type="checkbox"/> Rain
<input type="checkbox"/> Hail
<input type="checkbox"/> Wind
<input type="checkbox"/> Thunderstorm
<input type="checkbox"/> Traffic
<input type="checkbox"/> Construction
<input type="checkbox"/> Loud Music
(Bass/Treble)
<input type="checkbox"/> PA System | <input type="checkbox"/> Whistle
<input type="checkbox"/> Children Playing
<input type="checkbox"/> Screaming/Yelling
<input type="checkbox"/> Gunshots
<input type="checkbox"/> Fireworks
<input type="checkbox"/> Phone
<input type="checkbox"/> Alarm Bell
<input type="checkbox"/> Doorbell
<input type="checkbox"/> Washer/Dryer | <input type="checkbox"/> Shower
<input type="checkbox"/> Hair Dryer
<input type="checkbox"/> Kitchen Appliances
<input type="checkbox"/> Dogs Barking
<input type="checkbox"/> Police/Fire/
Ambulance Siren
<input type="checkbox"/> Deep Voices |
|---|---|--|

Other

- | | | |
|---|--|---|
| <input type="checkbox"/> Canned food (patte,
chunks/gravy)
<input type="checkbox"/> Kibble food
<input type="checkbox"/> Vacuum
<input type="checkbox"/> Broom
<input type="checkbox"/> Mop
<input type="checkbox"/> Pots/Pans
<input type="checkbox"/> Plastic Bags
<input type="checkbox"/> Garbage Can
<input type="checkbox"/> Boxes
<input type="checkbox"/> Luggage | <input type="checkbox"/> Ironing Board
<input type="checkbox"/> Umbrella
<input type="checkbox"/> Children's Toys
<input type="checkbox"/> Baby Carrier/
Car Seat
<input type="checkbox"/> Stroller
<input type="checkbox"/> Wagon
<input type="checkbox"/> Mower
<input type="checkbox"/> Snow Blower
<input type="checkbox"/> Rake
<input type="checkbox"/> Shovel | <input type="checkbox"/> Wheelbarrow
<input type="checkbox"/> Garden Hose
<input type="checkbox"/> Sprinkler
<input type="checkbox"/> Lawn Furniture
<input type="checkbox"/> Skateboard
<input type="checkbox"/> Power Tools
<input type="checkbox"/> Bicycle
<input type="checkbox"/> Rollerblades
<input type="checkbox"/> Kayak/Canoe
<input type="checkbox"/> Skis
<input type="checkbox"/> Ladder |
|---|--|---|

Kitten Pack – Socialization at Home

Providing a variety of experiences for your kitten, when you yourself may be limited in your travels and interactions, poses a significant and novel challenge for all families during the pandemic and even now, in a post-pandemic world. Socialization by getting out into the world is best, but when that isn't feasible, here are a few suggestions on how to make it work:

- Screen your socialization list for activities you can modify – many items on the list are available from the comfort of your own home.
- Get outside – a significant portion of socialization involves being near, but not in direct contact with, other people and animals, so even walking or driving in the vicinity of others is beneficial.
- Create diversified environments and stage stimuli within your home – play dress-up with a variety of items you have on hand, scatter and rotate novel items throughout your home for your kitten to investigate, and play sounds on your computer for things you might not be able to expose your kitten to yet – all while offering treats and making the experiences fun!
- Don't forget crate and separation training (it isn't just for dogs!) – it is a significant concern for veterinary personnel and pet owners that we will see a wave of separation anxiety once you cannot be with your pet as much. Ensure you are practicing the skills required to have your pet spend time comfortably away from you.

Additional resources:

- [Early Socialization in Kittens](#)

Kitten Pack – Feline Body Language

Please **monitor your kitten/cat for the following signs of fear and/or anxiety.**

- lower body position (slight decline of the head/shoulders to major cowering)
- hiding
- looking away, turning away, moving away
- dilated pupils when room is not dark
- ears pulled sideways (“airplane ears”, back towards shoulders, or flat to the head)
- tightly curled
- **panting** **note – panting in cats is NOT normal and reflects severe stress +/- respiratory disease
- furrowed brows, tight facial expression
- increased blinking
- tail flicking/wagging (non-friendly in most cats)
- trembling/shaking
- urination, defecation
- moving in slow motion
- **hypervigilance**
- pacing, inability to settle down, excessive facial marking
- excessive vocalization (growling, yowling, hissing, spitting)
- lip licking, yawning, shaking out of context
- excessive grooming, increased shedding, increased dander when compared to normal
- shaking off when not wet
- **refusal of treats or requiring higher value treats**
- **taking treats more aggressively**
- whiskers pulled back
- puffed haircoat (back, tail)
- signs of pending aggression (freezing, stiffening, arched back, ears forward, staring, growling, hissing, swatting, biting)

If you notice signs of fear or anxiety...

DO:

- **increase treat value and frequency, or bring out a toy and start a play session.** Your goal is to change your kitten’s emotional state, and subsequently, his or her emotional response to the feared stimulus
- move away from the stimulus if your kitten won’t take treats or play, until you find a non-stressful starting point where your kitten is willing to engage
- **move closer at your kitten’s pace** (not yours)

DON’T:

- **coddle your kitten** (eg. soothing talk, telling your kitten “it’s okay”) – this may result in your kitten having difficulty overcoming fear when you aren’t present, and your behaviour may become a predictor in the future that something bad is about to happen
- withdraw from your kitten if they seek you when frightened
- **correct or yell at your kitten** – this is likely to worsen fear

Body Language of Feline Anxiety



Kitten Pack – Basic Learning Concepts

Before training your kitten, it is important to understand the following:

- Cats are **AMORAL** – they do not know right from wrong, and contrary to popular belief, they do not experience guilt or perform behaviour out of spite. They understand only what is safe, and what isn't. This is important in how we think about and respond to “bad” behaviour.
- Cats are opportunistic and **EGOCENTRIC** – they are focused on what's in it for them, and will choose what is best for them over what is best for you if these are not aligned. This is important because we can create a learning environment where your kitten is motivated to perform “good” behaviour for his/her own benefit.
- Cats are **INDEPENDENT**, but can learn to enjoy companionship – on their terms.
- Cats are **ALWAYS LEARNING** – even when you aren't actively teaching, and you may not always be in control of reinforcements and punishments. A cat's behaviour should always be put into context of how it is reinforced or punished.

Successful feline parenting relies on the following simple rules:

- **BE FAIR** – take into consideration your cat's perspective. Don't create unrealistic expectations for your kitten. If you catch yourself saying he or she “should know better”, re-evaluate the situation to determine why he or she didn't understand.
- **BE A GOOD TEACHER** – create an environment where your kitten is likely to succeed and guide him or her into making the right decision. Don't set your kitten up to fail, then be upset when he or she does.
- **COMMUNICATE CLEARLY** – mark and reward behaviour you want your kitten to repeat, so they might understand what you expect from them.
- **BE CONSISTENT** – avoid rewarding a behaviour one day and punishing it the next. Ensure family, friends, and guests have the same rules and expectations for your kitten.
- **GIVE YOUR KITTEN CHOICES** – allowing your kitten to choose (whether to interact, play, participate) decreases anxiety and improves confidence. This doesn't mean allowing your kitten free reign – you can still control the consequences of each choice.
- **BE YOUR KITTEN'S ADVOCATE** – be forever monitoring your kitten's body language and emotional state, and protect him or her from overwhelming or frightening situations by changing the emotional response or removing him or her from the situation, if needed.

Kitten Pack – Basic Learning Concepts

Rules for Successful Learning:

1. Consequence must be **IMMEDIATE**
> ideally, within a half second of the behaviour
2. Consequence must be **CONSISTENT**
> given every time the behaviour is performed
3. Consequence must be **SUFFICIENTLY DESIREABLE or AVERSIVE** to change the frequency of the behaviour
> strength required varies across individuals

General Recommendations for Training New Behaviours:

- Use an **upbeat** voice.
- Train when your kitten is **hungry**.
- ALWAYS have treats at the ready, and **reward liberally** with very small treats.
- Start where distractions are at a minimum, and **gradually increase the number of distractions present**. Only change environments once the behaviour is consistently performed in the current environment. Start at home → yard → neighbourhood → veterinary clinic.
- Higher value treats/toys may be needed in environments where more distractions are present.
- ID non-food reinforcers – toys, catnip, petting, praise and other rewards can and should also be used with many cats.
- Limit training sessions to 5 minutes – kittens have a short attention span.
- End training sessions if your or your kitten becomes frustrated – but **end on a positive**. For example, ask for a behaviour your kitten loves to do.
- Use a marker (clicker or word) – this allows for faster learning.
- Only **put a behaviour on cue once it is reliably performed** – avoid the temptation to say “sit” when first introducing the behaviour. **Visual cues (hand signals)** tend to work better than auditory cues, but both are effective.
- When first teaching a new behaviour, it should be rewarded every time BUT once a behaviour is learned and performed reliably, it should be intermittently rewarded. Behaviours that are consistently rewarded are more likely to become extinct (the behaviour is no longer performed – loss of learning) once the reward is no longer consistently given; however, **behaviours once learned that are then intermittently rewarded are more resilient**.

Kitten Pack – Basic Learning Concepts

Positive, force-free training, where reward-based training is emphasized and positive punishment or aversive consequences are avoided, is the preferred method of training by veterinary behaviour specialists and many certified trainers.

Positive, reward-based training methods are more effective because they:

- Give guidance on what TO DO;
- Help to strengthen the human-animal bond through positive experiences and promoting a trusting relationship;
- Motivate an animal to participate in learning activities; and
- Do no harm, even when used incorrectly.

Punishment and training based on “dominance theory”, initially applied to dogs but not applicable to either species, may result in successful learning and obedient animals in some situations, but has also been shown to make normal animals more anxious and fearful, and fearful animals aggressive. Punishment may include but is not limited to yelling and other loud noises (horn, whistle), hitting or physical contact, spray bottles, scat mat, forced restraint, etc. The type of training you use also contributes to the type of relationship you have with your cat – and how much he or she trusts you as a leader.

Punishment-based and forceful methods are not recommended because:

- They are more difficult to meet the rules for successful learning;
- They tell an animal what NOT to do, which does not help them understand what TO do;
- They can result in pets losing trust in their owners and/or becoming fearful of their owners, even when paired with reward-based training;
- They can promote learned helplessness (giving up); and
- When used incorrectly, ‘punishment’ with no effect on behaviour is effectively abuse.

Kitten Pack – Meeting Basic Feline Needs

Cats are more independent than dogs, and for this reason, although they can live harmoniously within our households, it is important to meet their basic needs, which are very different than that of a human or a dog. Their social structures and the way they've previously lived is very different than that of social creatures, and although they may coexist with other cats and dogs, or humans, **they may not necessarily seek, or be comfortable with, direct interaction with all members of the family.**

Forcing cats into domestic environments without consideration of their needs may result in stress, which may lead to **behavioural issues** (aggression towards humans or other pets, litterbox use issues), **or medical issues** (stress has been implicated as a factor in feline upper respiratory disease and feline urinary disease, and likely plays a role in other diseases, such as gastrointestinal disease), which can be hard on you, your cat, and your wallet. The best medicine is prevention. See below summary taken from catfriendly.com to ensure you're meeting all of your cats' basic needs.

1. **Provide a safe place** – Every cat needs a safe, secure place where it can retreat to so that it feels protected or which can be used as a resting area. The cat should have the ability to exit and enter the space from at least two sides if it feels threatened. Most cats prefer that the safe space is big enough to fit only themselves, has sides around it, and is raised off the ground.
2. **Provide multiple and separated key environmental resources** – Including food, water, toileting areas, scratching areas, play areas, and resting or sleeping areas. These resources should be separated from each other so that cats have free access without being challenged by other cats or other potential threats.
3. **Provide opportunity for play and predatory behavior** – Play and predatory behaviors allow cats to fulfill their natural need to hunt. Play can be stimulated with the use of interactive toys that mimic prey. Cats need to be able to capture the “prey”, at least intermittently, to prevent frustration. Using food puzzles or food balls can mimic the action of hunting for prey, and provides more natural eating behavior.
4. **Provide positive, consistent, and predictable human–cat social interaction** – Cats' individual preferences determine how much they like human interactions such as petting, grooming, being played with or talked to, being picked up, and sitting or lying on a person's lap.
5. **Provide an environment that respects the importance of the cat's sense of smell** – Unlike humans, cats use their sense of smell to evaluate their surroundings. Cats mark their scent by rubbing their face and body, which deposits natural pheromones to establish boundaries within which they feel safe and secure. Avoid cleaning their scent off these areas. Some smells can be threatening to cats (unfamiliar animals, or scented products or cleaners) which may lead to problematic behaviors such as urinating outside of the litter box or scratching in undesirable areas.

Read more [here](#).

Kitten Pack – Litter Training

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Provide your kitten with a litterbox he WANTS to use. Litterbox training in most cats comes naturally, but some cats can develop very specific preferences that may interfere in appropriate litterbox use.

How to start.

- The **number of litterboxes available should be equal to the number of cats plus one**. Litterboxes in the same room are considered a single litterbox.
- **Start with simple litterboxes** (eg. Tupperware boxes), **and simple litter** (unscented, clumping), as this is the preference of most cats. **Choose locations that are easily accessible, but quite** (furnace rooms, laundry rooms may be too out of the way and/or loud and scary to be a bathroom). If your kitten is not using this type of litter, box, or location, and **ADD** options (don't replace), including covered boxes, boxes in different locations, and litters of different odours and textures. Take note of what your kitten prefers.
- **Show your kitten where boxes are located as soon as he arrives** at his new home.
- **Place your kitten in her box immediately after eating, sleeping, or play**. If he shows behaviours suggestive of needing to go to the bathroom outside the litterbox (eg. digging), pick him up gently and place him in his litterbox.
- **Create a positive association with using the box** – treats, toys and praise can be used, and are best offered initially when your cat visits the location of the litterbox, and ultimately more precisely within 1 second of eliminating in the right place.
- **Do not punish for accidents**, as this may make litter training MORE difficult.
- For kittens/older cats that are used to eliminating outdoors, consider starting with soil as the initial litter type, as this may be more familiar to your cat and help with the transition to eliminating indoors.

Keep the litter clean.

- Just like you, most cats do not like residual litterbox odours, and some cats will avoid using the litterbox when it is not clean.
- **Scoop/remove soiled litter daily; and dump and replace all litter weekly**. Clean the litterbox with a mild soap and water, rather than harsh-smelling bleach or commercial cleaners.
- **Use an enzymatic cleaner** for any accidents outside of the litterbox, to eliminate odours.

Solving Litterbox Issues.

- If your cat shows urination or defecation outside the litterbox, visit your veterinarian to rule out underlying medical causes. Ensure the above litterbox rules are met, and that environmental needs are also met. See additional resources for solving litterbox issues below:
 - [Vetstreet](#) Resource
 - [Veterinary Partner](#) Resource

Kitten Pack – General Problem Solving and Prevention

Most problem kitten behaviours result from a misunderstanding of feline behaviour and their environmental needs. See [biting](#), [scratching](#), and [litterbox issues](#) for the most common problem feline behaviours.

General Problem Behaviour Prevention:

- Manage your environment to set your kitten up for success. Actively **monitor** your kitten. **Kitten-proof** your house for when active monitoring cannot occur.
- Create a consistent schedule and routine, including feeding, training, and play times.
- Create consistent rules, which will be enforced by all family members and which will apply to all cats equally. For example, will your kitten be allowed on the furniture? Will your kitten have complete, or limited, access to the house?

Problem Solving Model: This model can be used to solve other problem kitten behaviours. *Adapted from Puppy Start Right's Foundation Training for the Companion Dog, and just as applicable to feline training!*

	Description	Example
IDENTIFY WHAT THE BEHAVIOUR IS, WHEN IT IS PERFORMED, AND WHY	<p>What is the kitten doing?</p> <p>When is he or she doing it?</p> <p>Why – what's in it for him or her?</p>	The kitten is jumping on the counter... when the family is not paying attention to her... because she receives attention – <i>the kitten is yelled at or pushed off the counter, which is regarded as attention by the kitten.</i>
CONTROL THE WHEN AND/OR WHY	<p>Can the trigger be avoided?</p> <p>Can the current reward be removed?</p>	A kitten cannot receive attention at all times, but more scheduled play/training may help. If possible, the kitten's access to counters can be limited, and/or the kitten can be ignored when on the counters.
REPLACE THE BEHAVIOUR	Can a more appropriate/desirable behaviour be taught and rewarded?	The kitten is taught to sit, or to fetch a toy . The family rewards the kitten with their attention .

An **extinction burst** is often seen once the previously rewarded behaviour is no longer rewarded (the behaviour initially increases/worsens) – be persistent, the behaviour will **initially increase, then stop**.

Kitten Pack – Prevention and Solving Specific Behaviours

Biting:

- **Biting is a normal part of kitten play and predation behaviour.** Play is important to provide exercise, and mental enrichment, to every cat. That said, pouncing and biting hands and feet may seem cute when they're little, but this can cause injury once they are fully grown – and what you teach them now, will set the stage for what they think is okay later.
- **Do not encourage play of hands and feet,** including through socks, gloves, or under blankets.
- **Redirect attention to appropriate play items** – ideally, items that are held at a distance, such as wand toys. Play often, and rotate toys used to keep your kitten interested.
- Avoid handling your cat directly during play, and allow them to calm down before touching after play.
- Additional resources: [Teaching Kittens Gentle Play](#). [How to Play With Cats](#). [Types of human-directed feline aggression](#). [Predatory Aggression in Cats](#).

Scratching:

- **Scratching is a normal feline behaviour.** Scratching provides a means of visual and scent marking. When a cat lives with us in our homes, this may create conflict with human members of the household, in relation to WHERE the cat can scratch.
- **Offer a variety of appropriate scratching material** as soon as your cat enters your home, to determine what they like to scratch best. Vertical posts, taller than your cat, and sturdy enough not to wobble during scratching are ideal, though some cats may prefer items that are horizontal or at an angle. Possible textures include sisal rope, cardboard, carpet, or wood.
- **Reward your cat for interacting with, and scratching, appropriate scratch items** with food, petting, play, and/or praise.
- **If your cat is scratching an inappropriate item,** place a scratching post nearby the undesirable item +/- limit access to the item. Bring your cat from the inappropriate item to a more appropriate one. Consider using double-sided sticky tape to make the inappropriate item less desirable. Use of feline pheromones ([Feliway](#), [FeliScratch](#)) may help direct them to the right item. Consider possible stressors that may be affecting scratching behaviour (eg. conflict with other cats, cats outside).
- Declawing is not a humane means of preventing scratching.
- Additional resources: [Living with a Clawed Cat](#). [Alternatives to Declawing](#).

Litterbox Issues

- See recommendations and resources [here](#).

Kitten Pack - Nutrition

Which food?

The amount of information (and misinformation) available in regards to pet foods can be overwhelming. Here are some facts and considerations when making your decision.

1. IS IT SAFE?

The **manufacturer's name and contact information** should be readily available, such that you or your veterinarian can pose questions to the manufacturer, and discuss concerns should they arise. See [link](#) for more information on questions to ask.

Raw food diets come with significant risk to both human and pet health, including but not limited to food-borne illness and parasitism; therefore, they **should be avoided**.

2. IS IT NUTRITIOUS?

AAFCO Statement. There is little regulation in pet food labelling, but the Association of American Feed Control Officials (AAFCO) provides some basic standards for labeling in the industry. **Choose a diet with an AAFCO statement of balance - absence of any AAFCO statement is a red flag.**

Marketing. A great deal of marketing for pet foods involves strategic use of labels and ingredients, which can be misleading. For example, terms like "corn-free" or "gluten-free" implies that foods containing these ingredients are inferior, which is nutritionally inaccurate. See [link](#) for more information on pet nutrition fact vs. fiction.

Raw food diets and **homemade diets** are also a common trend. Although individual cats may do well on alternative diets, they are often not properly balanced, requiring additional supplementation at the advisement of a veterinary nutritionist.

3. IS IT RIGHT FOR **THIS** PET?

Life Stage. Nutritional requirements vary with age. This means that an adult food may not provide enough energy or protein for a growing kitten, but a kitten diet may have too much for an adult, causing problems such as weight gain. **A kitten-specific diet is strongly recommended during growth.** *"All life stages" diets are not recommended.*

A note on **therapeutic diets** - there are many diets available for a variety of health conditions, such as allergies, kidney disease, and obesity. These foods **should only be fed under the supervision of a veterinarian**, following a veterinary diagnosis. Over-the-counter urinary diets may be beneficial for cats without previously diagnosed urinary disease, but are not appropriate if your cat has been diagnosed with urinary disease in the past.

I'm still overwhelmed by my choices – just tell me what to feed! Although there are many diets that may be a good fit for your pet, I personally like **Royal Canin Development** or **Purina Essential Care Kitten**. Note - these diets have undergone feeding trials with strict quality control, and as such is only sold through licensed veterinary clinics.



Where to look (see diagram)	1/9	2/9	3/9	4/9	5/9	6/9	7/9	8/9	9/9
Ribs (red star)	Easily visible in short-hair	Easily visible	Can be felt easily	Can be felt easily	Felt w/ gentle pressure	Felt w/ pressure	Felt w/ heavy pressure	Cannot feel	Cannot feel
Lower spine (blue circle)	Easily seen and felt	Easily visible	Visible	Can be felt easily	Felt w/ gentle pressure	Felt w/ pressure	Difficult to feel	Cannot feel	Cannot feel
Hip/Pelvic bones (green star)	Easily seen and felt	Visible	Becoming visible	Not visible, can be felt	Not visible, can be felt	Not visible, can be felt	Cannot feel	Cannot feel	Cannot feel
Waist from above (black arrow)	Severe	Severe	Obvious	Obvious	Visible but not obvious	Moderate – in excess	Difficult to see	Absent	Absent – waist pushing out
Abdominal fat pads (also orange arrow)	Absent	Absent	Minimal	Minimal	Minimal	Visible but not obvious	Moderate	Prominent	Prominent
Additional fat	Absent	Absent	Absent	Absent	Minimal over ribs	Mild – ribs, waist	Moderate – ribs, waist	Visible ribs, waist, back	Thick over ribs, back, face, limbs
Belly tuck from side (orange arrow)	Severe	Severe	Moderate	Easily seen	Visible but not obvious	Absent	Absent – belly slightly round	Absent – belly round	Absent – belly distended

UNDERWEIGHT **IDEAL** **OVERWEIGHT**

Handout by Dr. Kayla Bilborrow
Pictures from WSAVA Feline BCS Chart

Kitten pack - Nutrition

How much?

This is perhaps the most important question. Just like in humans, there is an incredible amount of individual variability in a cat's energy requirements and their metabolism. Additionally, different foods vary considerably in caloric density, so 1 cup (or gram) of one food is not equal to that of another. Finally, **obesity is a significant, and common, medical concern in cats – and if a kitten becomes obese during growth, they are likely to struggle with obesity for the remainder of their lives.**

1. Choose a starting point.

- **Bag Recommendations.** Try feeding the amount recommended based on your pet's weight. This is a good starting point, especially if you don't enjoy math, and is often appropriate for kittens (though may be excessive for adults).
- **Calculating Energy Requirement.** A more scientific means of determining how much food your pet should eat is by taking your pet's ideal weight and developmental stage, and calculating their energy requirements. This will require knowledge of your food's kcal/cup or, better yet, kcal/g, as **measuring by weight of food is often more consistent and more accurate than measuring by volume.**
- **Some helpful equations:**

$$\text{Resting Energy Requirement (RER, in kcal/day)} = 70 \times (\text{ideal body weight in kg})^{3/4}$$

Note – this equation may be modified if your pet is underweight or overweight. A veterinary professional can help you with this.

- Kitten 0-4 months (kcal/day) – multiply RER by 3
- Kitten 4+ months (kcal/day) – multiply RER by 2
- Neutered adult (kcal/day) – multiply RER by 1.2
- Intact adult (kcal/day) – multiply RER by 1.4
- Volume to feed (cup/day) = (kcal/day) / (kcal/cup of food)
- Weight to feed (g/day) = (kcal/day) / (kcal/g of food)

2. Evaluate.

- **Weigh your pet every 2-4 weeks.** Your veterinarian can also teach you how to body condition score your pet to help you determine whether your pet is at their ideal weight, or whether they can stand to gain or lose some weight.

3. Modify and Re-evaluate.

- **A diet plan often needs to be adjusted.** If you find your pet is gaining or losing weight when they shouldn't, or aren't when they should, modify the amount of food you are giving accordingly, by 5-10%, and recheck in a month. **Need some help?** Stony Plain Veterinary Clinic offers complimentary weight checks and consultations – all you need to do is ask!

Don't forget treats, including human scraps! **Treats should only make up 10% or less of your pet's daily caloric intake.** If you don't know how many calories a food item is, you shouldn't feed it.

Kitten Pack – Nutrition & Resources

How often?

This is an easy one – **the more often, the better**. Determine how much your cat needs in a day, then divide that total amount into 2-4 servings per day.

By what method?

Cats should not be fed with a bowl – as a predator, it is not their natural means of obtaining food, and **offering food using a feeding toy or puzzle serves to enrich a cat's feeding experience, to challenge the mind, and to slow down speedy eaters**. Offering food this way does not need to be complicated – there are a variety of [homemade](#) options and many commercially available options, including an entire website dedicated to [food puzzles for cats](#). See general resource on [how to feed a cat](#).

Additional General Nutritional Resources:

- To ensure your pet's stool is normal, use this [fecal chart](#). Abnormal fecal scores (e.g. diarrhea, soft stools) can be a marker of infection (e.g. parasites), disease (e.g. inflammatory bowel disease), dietary intolerance (e.g. food allergy), dietary indiscretion (e.g. having eaten something that is not edible) or a sign that the pet is being transitioned to a new diet too quickly.
- Resources for [human foods](#) – search database to review nutritional information on common human foods.
- Click for more information on [AAFCO labelling and pet food regulation](#).

Kitten Pack – Common Household Hazards

<p>CHOCOLATE Contains “theobromine”, which may cause heart arrhythmias, tremors and seizures. Types vary – bakers chocolate and dark chocolate are the worst.</p>	<p>CAFFEINE Can cause increased heart and respiratory rates, and/or muscle tremors. At high doses, no antidote is available and it may be fatal.</p>	<p>ONIONS, GARLIC Can rupture red blood cells, resulting in anemia (weak, pale), blood-coloured urine. Beware as some baby foods also contain onion powder. Cats are MORE sensitive than dogs.</p>	<p>GRAPES, RAISINS The link between grapes/raisins and toxicities in cats is less clear than in dogs, but there are reported cases of kidney failure – so best to avoid.</p>
<p>RAW MEAT (incl. eggs) May contain Salmonella, E. Coli, and other harmful bacteria and parasites. Human health AND pet health risk.</p>	<p>RAW EGG WHITES Contains “avidin” which interferes with absorption of “biotin” (vit B7). May result in poor growth, lethargy, & skin problems.</p>	<p>VEGETARIAN DIETS Cats are obligate carnivores, meaning they rely on meat to obtain essential nutrients. A vegetarian diet can kill a cat.</p>	<p>ELASTICS, STRING When ingested, can become stuck on one end at the tongue or stomach, and result in life-threatening injury to the intestines.</p>
<p>ACETAMINOPHEN (TYLENOL) Cats do not have the capacity to process this drug in the liver, resulting in life-threatening liver failure.</p>	<p>ESSENTIAL OILS Liver toxicity associated with ingestion. Fine-droplet diffusers may coat the haircoat and be ingested while grooming.</p>	<p>PERMETHRIN Commonly found in over-the-counter tick products for dogs – severe neurological signs including tremors, depression seizures.</p>	<p>LILLIES (Lilium, Hemerocallis spp) Even small amounts eaten can result in life-threatening kidney failure.</p>

Check out <http://www.petpoisonhelpline.com/pet-owners/> for more information on common toxicities and how to prevent and treat them.

If you suspect your pet may have been exposed to one of the above, or another toxin including human or pet medications, poisons, and non-edible items, please contact your veterinarian immediately.

Kitten Pack – Oral Health Care

Why practice preventive oral health care in your kitten?

- Your kitten's adult teeth don't come in fully until around 5-6 months, so why protect teeth that are just going to fall out?
- Introducing teeth brushing in kittens is about **training them to enjoy the process**.
- Once adults, **brushing your cat's teeth is the single most important thing you can do to maintain your cat's oral health**, and it's easy if you teach it right.
- It can also save you money in the long run, by reducing the frequency your pet requires dental procedures with your veterinarian (tooth cleaning, removal).

How to introduce tooth brushing:

- It's all about introducing brushing in slow steps, rewarding each phase so she associates brushing with good things, and never pushing your kitten to the point of discomfort. The goal is for her (and you) to look forward to tooth-brushing time.
- **Brushing must be done AT LEAST every 1-2 days**, or else plaque progresses to the point where brushing won't remove it. Here's how you start:

1. Place a bit of a **flavoured, pet-specific toothpaste** on your finger and offer it to your cat. Don't put your finger in her mouth just yet – let her lick the toothpaste off your finger like a treat. You can also spread a small amount of toothpaste on a toy, and experiment with different flavours to find her favourite.
2. Once she eagerly seeks the toothpaste, try placing some on your finger and rubbing it gently on her gums. Keep it to a few seconds at first, then gradually increase the amount of time and area that you cover.
3. Next, so long as she happily accepts the previous step, place some toothpaste on a **soft-bristled baby toothbrush**, and let her lick it off on her own. Note – some cats who may not tolerate brushing may make it this far, and chew on the toothbrush willingly, which still provides oral health benefits.
4. Finally, you can introduce the toothbrush into her mouth. As with finger brushing, start with a few seconds and gradually progress to brushing.

See [video](#) of this training process in a dog (recommendations on adaptations for cats).

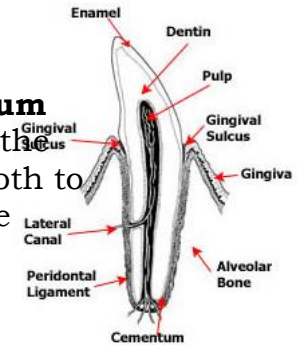
Troubleshooting:

- **If she is resisting brushing, you're moving too quickly**, or she doesn't like the toothpaste flavour enough. Try spending more time on previous steps, and if that doesn't help, try a different flavour.
- Note: Although some toothpastes are enzymatic (help to break down tartar), the primary purpose of a pet toothpaste is to provide a reward – it's the mechanical brushing that removes plaque. Using a rubber brush, washcloth or your finger may have some benefit, but it is not as good as a toothbrush. You can try adding other things like chicken broth to the toothbrush if your pet doesn't take to the commercially available toothpastes.

Kitten Pack – Oral Health Care

What is periodontal disease?

- Periodontal disease refers to disease of the tissues in the mouth that support the teeth. This includes the **cementum** (hard coating of the part of the tooth under the gumline), the **periodontal ligament** (the structure that attaches the tooth to the bone of the jaw), the **alveolar bone** of the jaw, and the **gingiva** (gums).



What causes this condition?

- Periodontal disease results from “**plaque**” build-up on the tooth’s surface, which then affects nearby structures. Plaque is comprised of many things, including elements from the saliva called glycoproteins, bits of food, bacteria, and the harmful products made by bacteria. It can exist not only over the part of the tooth you can see, but deeper under the gumline too.
- If left on the teeth for approximately 2 days, plaque will mineralize (become harder), progressing to “**calculus**” (tartar). This material acts as a **local irritant to adjacent tissues, protects deeper plaque, maintains an oxygen-free environment that bad mouth bacteria love**, and can **prevent healing of already diseased gingiva**.

What sorts of pets get periodontal disease?

- Periodontal disease can affect **all pets**. Every animal will develop some form of periodontal disease as they age, though some pets are at higher risk of developing more serious forms faster due to conformation (smushy faced breeds), genetics, or **concurrent diseases** (eg. diabetes, kidney disease, liver disease, immunosuppression).

Resorption

- This condition is common in cats, and results in a breakdown of tooth material, resulting in nerve exposure, and pain, until there is no tooth material remaining. The only treatment for resorption is removal of the tooth. See [photos and more information on resorption](#).

Stomatitis/Gingivostomatitis

- This condition is most common in purebred cats though may occur in any breed, and results in severe redness, swelling, and pain of the gums and mouth. Although some cats may respond to frequent cleaning and medications, most require that all teeth be removed to provide comfort. See [photos and more information on stomatitis](#).

Kitten Pack – Oral Health Care

How can you tell if your pet has periodontal disease?

- **bad breath**
- red, swollen gums
- bleeding gums
- **visible plaque, calculus**
- recession of gums
- movement of teeth
- difficulty eating, dropping food
- abnormal chewing
- pawing at or rubbing mouth
- **less playful, especially with toys**
- excessive drooling
- discharge from the nose or mouth
- Some pets show **no change!**
Many pets hide pain extremely well

What can happen if periodontal disease is not addressed?

- WORSENING of above signs and **increased pain**
- **loss of teeth**
- creation of abnormal holes between the mouth and nose or other areas of the skull (oro-nasal fistula, oro-antral fistula)
- **spreading of disease** within the tooth itself
- progression of painful inflammatory diseases
- **increased cost of treatment** (increased length of anesthetic, increased invasiveness, increased number of teeth needing to be removed)

What treatments are recommended?

- The most important aspect of treatment is **removal of plaque and tartar.**
- In between veterinary visits, owners can practice at-home management, including **tooth brushing, [oral antimicrobial rinses and gels, and specialized dental chews and diets.](#)** Your veterinarian can help you develop a plan that works best for you and your pet.
- Most of the time, at-home management needs to be supplemented with dental surgeries at your pet's veterinary clinic, but **proper management at home helps to reduce the number, length, invasiveness, and price of dental surgeries.**

Kitten Pack - Vaccinations

When to vaccinate:

- **FVRCP Vaccine:** Core vaccine targeting **F**eline **V**iral **R**hinotracheitis (Feline Herpes), **C**alicivirus, and **P**anleukopenia. This vaccination is recommended for **ALL CATS, including indoor-only cats.**
 - if <12 wks of age = one vaccine, repeated every ~4 wks until 16 wks old...
 - if ≥12 wks of age = one vaccine, one booster after ~4 wks...
 - ...then repeated after 1 yr, and subsequently repeated annually or every 3 yrs (depending on the brand of vaccine used)
- **Rabies Vaccine:** Core vaccine targeting the Rabies virus. This vaccination is recommended for **ALL CATS, including indoor-only cats.**
 - one vaccine given at or after 12 wks of age...
 - ...then repeated after 1 yr, and subsequently repeated annually or every 3 yrs (depending on the brand of vaccine used)
- **FeLV Vaccine:** Feline Leukemia. Optional vaccination primarily recommended for **cats who may encounter cats outside the household** (outdoor access, grooming, boarding).
 - two vaccines, 4 weeks apart and given at or after 12 weeks...
 - ...then every 12 months thereafter (depending on risk)

Note: Other vaccinations are available but are not commonly given, usually due to decreased efficacy or minimal/absent local risk for the disease they target.

Kitten vaccine schedules:

- A kitten's **'maternal immunity' wanes between 8 and 16 weeks.**
- Kittens cannot respond to a vaccination when their maternal antibodies are present, but are **unprotected when maternal immunity and immunity provided by vaccination are both absent.**

Adult vaccine schedules:

- Studies indicate that **immunity provided by vaccination wears off more quickly in some cats**, while in others the immunity persists for many years. **Vaccine schedules ensure all cats are maximally protected.**
- Titer assessments are available but can be cost-prohibitive, and there is little research to determine what titer is 'protective'.
- Vaccines are safe and adverse effects of vaccination are minimal for majority of animals, while more severe effects are monitored for, and can be treated and prevented. Vaccination, even if it is given more frequently than "required", is more cost-effective and provides owners with a greater sense of security knowing their pet is protected, regardless of individual variability in persistence of immunity.
 - **Vaccine reactions in cats most commonly include breathing changes (increased rate/effort), or skin changes (swelling of the face, hives)**, with occasional gut upset (vomiting, diarrhea), though this is more common in dogs. **Vaccine reactions are most commonly seen 1-2 hours after vaccination** but may be delayed by up to 48 hours. If seen, your veterinarian should be contacted to determine if treatment is required.
 - Cats can develop a lump at the site of vaccination. Lumps are most often not a concern, but **seek veterinary assessment if lumps: are still present after 3 months; are greater than 2cm; or are growing after 1 month.**

Kitten Pack - Vaccinations

Why vaccinate? To prevent these common, serious, highly contagious, and/or fatal diseases.

FELINE HERPES: Often referred to as “kitty cold” or “cat flu”, this disease is **common** across feline populations, and result **in lifelong infection**. Transmitted through eye/nose discharge and saliva, and is highly contagious. Symptoms include eye redness/squinting/discharge, and/or sneezing, nasal congestion/discharge. **Treatment** is supportive. Stress results in repeated flare-ups. **Prevention** through vaccination, stress management.

CALICIVIRUS: As with herpes, this disease is also **common** across feline populations, and result **in lifelong infection**. Transmitted through eye/nose discharge and saliva, and is highly contagious. Symptoms include eye redness/squinting/discharge; sneezing, nasal congestion/discharge; and/or sores of the mouth or tongue. As with herpes, **treatment** is supportive. Stress impacts repeated symptoms. **Prevention** is achieved through vaccination and stress management.

PANLEUKOPENIA VIRUS: It is fairly **common**, and it is able to live in the environment for long periods of time. It is transmitted via contact with infected feces. It causes severe, bloody diarrhea, dehydration, and in some cases a significant decrease in white blood cells, resulting in secondary infections, which may be fatal. Kittens exposed in the womb may be wobbly/uncoordinated, and remain this way for their lifetime, due to abnormal brain development. Treatment is supportive, and **prevention** is achieved through vaccination and isolation of infected cats.

FELINE LEUKEMIA VIRUS: This disease is **immunosuppressive** and results in **lifelong infection**. The virus is transmitted between cats, with friendly (sharing space/resources) or unfriendly (fighting) contact. Symptoms vary and are generally vague and/or secondary (non-specific malaise, weakness, recurrent infection). Treatment is supportive. **Prevention** is achieved through vaccination, screening new cats, and limiting interaction with unfamiliar cats.

RABIES: This disease is less common, but it can be transmitted between many species, including **humans**. It is **fatal in all cases**, and there is **no treatment** available. Additionally, unvaccinated pets who experience potential or confirmed exposure to Rabies may need to be quarantined or euthanized.

Kitten Pack – Parasite Control

Why Give Parasite Control Products?

Protect your furry family members:

- Parasites can be transmitted between pets, and pets can re-infect themselves.
- Adverse effects of parasitism range significantly from minimally affected to severely affected, **depending on age and immune status**. Possible complications of parasitism include but are not limited to anemia (decreased red blood cells), discomfort from intense itching and damage to skin, gastrointestinal disease (vomiting, diarrhea, pot-belly, GI bleeding), and organ malfunction or failure.

Protect your human family members:

- Several pet parasites can infect humans (**zoonoses**)
- Some human groups are more at risk for developing disease
- **Pregnant** women or women who may become pregnant (internal parasites can cause abortion, birth defects if parasites migrate into the fetus)
- **Children <5 years** (in general, children are more likely to come into contact with, ingest and become infected with internal parasites)
- Immunosuppressed individuals (pregnant, **elderly >75 years**, individuals who are **HIV+**, who are undergoing **dialysis** or who are receiving immunosuppressive therapy such as **cancer patients** or **transplant patients**)

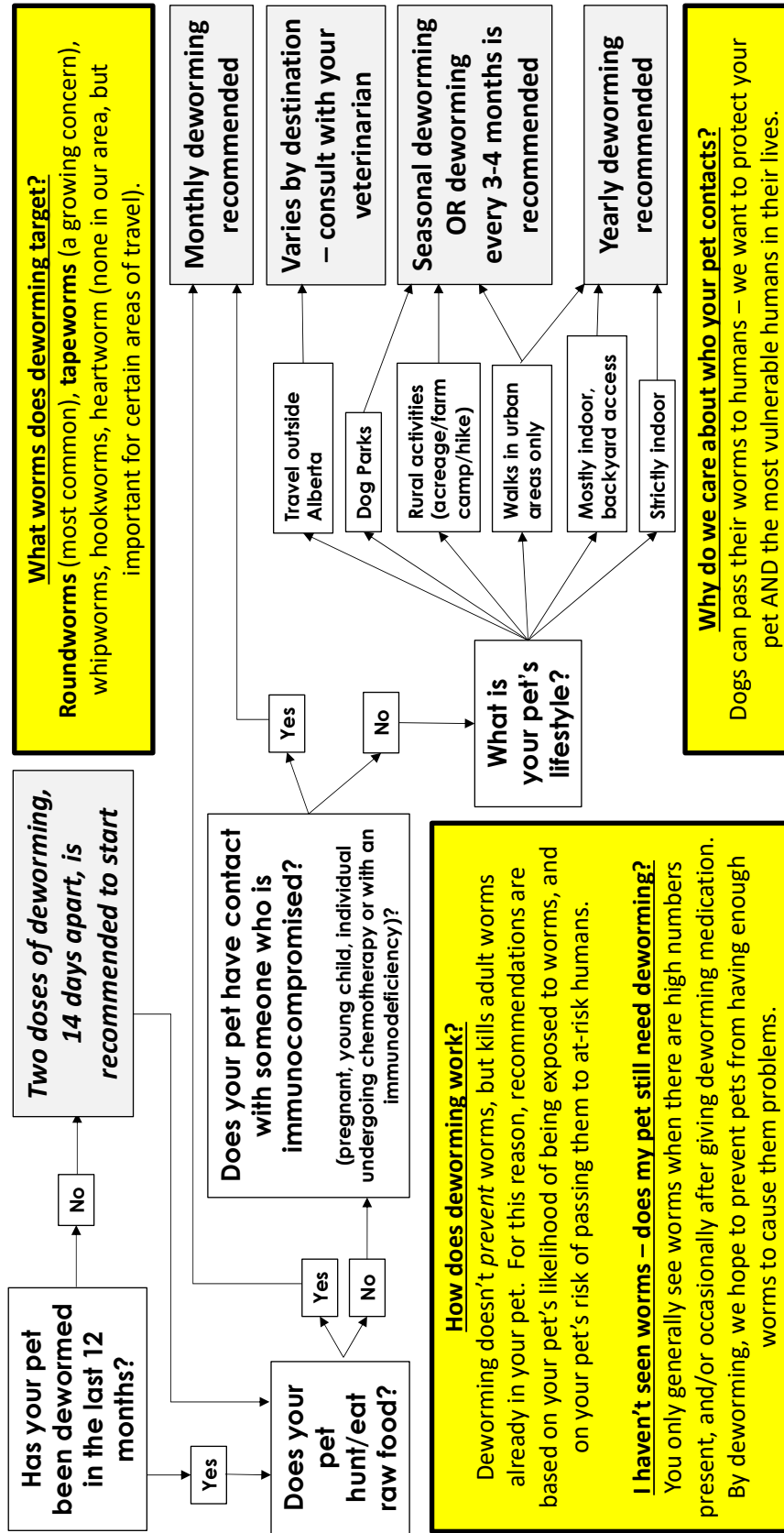
General Recommendations

- Practice **good sanitation** – keep the litterbox clean, wash your hands, and clean your kitten’s toys and bedding regularly.
- Focus on prevention for internal parasites - **deworm kittens every 2 weeks until 12 weeks of age, then discuss the best future deworming schedule for your kitten’s lifestyle with your veterinarian.**
- **Prevent fleas/ticks during warm months for cats with outdoor access**, treat lice and mites once infected or if risk of exposure is high.
- Increased or altered parasite prevention schedules may be required when your pet’s activities are higher risk, such as **cats who go outside in the spring/summer**; cats who will visit an environment with higher parasite load (boarding); or **when your pet travels outside the province**, where parasites uncommon at home are more prevalent.

Parasite Name	Life Cycle	Common signs of Infection	Important Facts
Sarcoptic Mite (<i>Sarcoptes scabiei</i>)	Transmitted between pets in contact Lives full life within tunnels under the skin	Severely itchy skin , hair loss (esp. at margins of ears and on sides of elbows and ankles) <i>Can be detected in a deep skin scraping</i>	ZONOSIS (mild itchy skin lesions that do not require treatment)
Demodectic Mite (<i>Demodex felis</i> , others)	Present in normal animals in small numbers, host specific; no transmission, immuno-suppression allows for overgrowth and disease Lives full life on/in skin	Patchy hair loss (with or without itchiness) <i>Can be detected in a superficial skin scraping</i>	Rare in cats.
Ear Mites (<i>Otodectes cynotis</i>)	Transmission occurs readily between animals in close contact Lives full life in ear canal	Headshaking, scratching at ears, discharge from the ears <i>Can be found in ear swab</i>	More common in cats than dogs, and HIGHLY contagious. Treat all in-contact pets.
Lice (<i>Felicola subrostratus</i>)	Transmitted between animals in close contact Lives full life on surface of the skin, is host specific, can live short-term on objects	Itchy skin <i>Can be detected on skin scrapings/hair</i>	Most common in young or old animals or those in unclean environments Need to treat animal and clean/dry environment
Ticks (several species)	Transmitted to cats by attaching as they pass through long grasses Lives most of life in the environment (survives in >4°C)	May have no signs or may be itchy, anemic (weak, pale) <i>Some species more common in other parts of the world can cause paralysis</i>	Can transmit disease (eg. Lyme Disease) Prevention > treatment (tick prevention products, check for attached ticks regularly)
Fleas (several species)	Transmitted to cats in an infected environment Lives most of life in the environment, can live in environment for long periods of time	Itchiness ; anemia (weakness, paleness) when in higher numbers on smaller animals	Can transmit disease (eg. tapeworm); may induce Flea Allergic Dermatitis Must treat animal and eliminate fleas from the environment

Parasite Name	Life Cycle	Common Signs of Infection	Important Facts
Roundworms (<i>Toxocara cati</i> , <i>Toxascaris leonina</i>)	Eggs are ingested from the environment or are passed from mother to offspring Worms live in the gut and steal nutrition from within the gut Eggs are passed in feces	May show no signs to vomiting, diarrhea, poor growth or weight loss, pot-bellied appearance <i>Can be detected in a fecal analysis</i>	Most common Kittens can die from high worm numbers Worms can migrate to lungs causing respiratory disease ZOONOTIC (lung, liver, brain, eye disease)
Hookworms (<i>Ancylostoma</i> spp, <i>Uncinaria stenocephala</i>)	Larvae in the environment penetrate into the skin or lining of the mouth or are passed from mother to offspring Worms live in the gut and suck blood from the gut Eggs are passed in feces	Anemia (weakness, paleness), poor growth or weight loss, dehydration, dark tarry feces (digested blood) <i>Can be detected in a fecal analysis</i>	Kittens, esp. small kittens with high worm numbers, can die from blood loss Worms can migrate to lungs causing respiratory disease ZOONOTIC (skin itchiness, gastrointestinal disease)
Whipworms (<i>Trichuris</i> spp)	Eggs are ingested from the environment Worms live in the gut Eggs are passed in feces	May show no signs to bloody diarrhea, weight loss, anemia <i>Can be detected in a fecal analysis</i>	Less common locally
Tapeworms (many species)	Larvae are ingested when an intermediate host (for example, a mouse or flea) is ingested Worms live in the gut and steal nutrition from within the gut Eggs are passed in feces	May show no signs to vomiting, diarrhea, weight loss <i>Can be detected in a fecal analysis</i> or seen with the naked eye (like rice grains)	More common in cats vs. dogs due to predation Some species are ZOONOTIC , though these forms are less common

HOW OFTEN SHOULD I DEWORM MY PET?



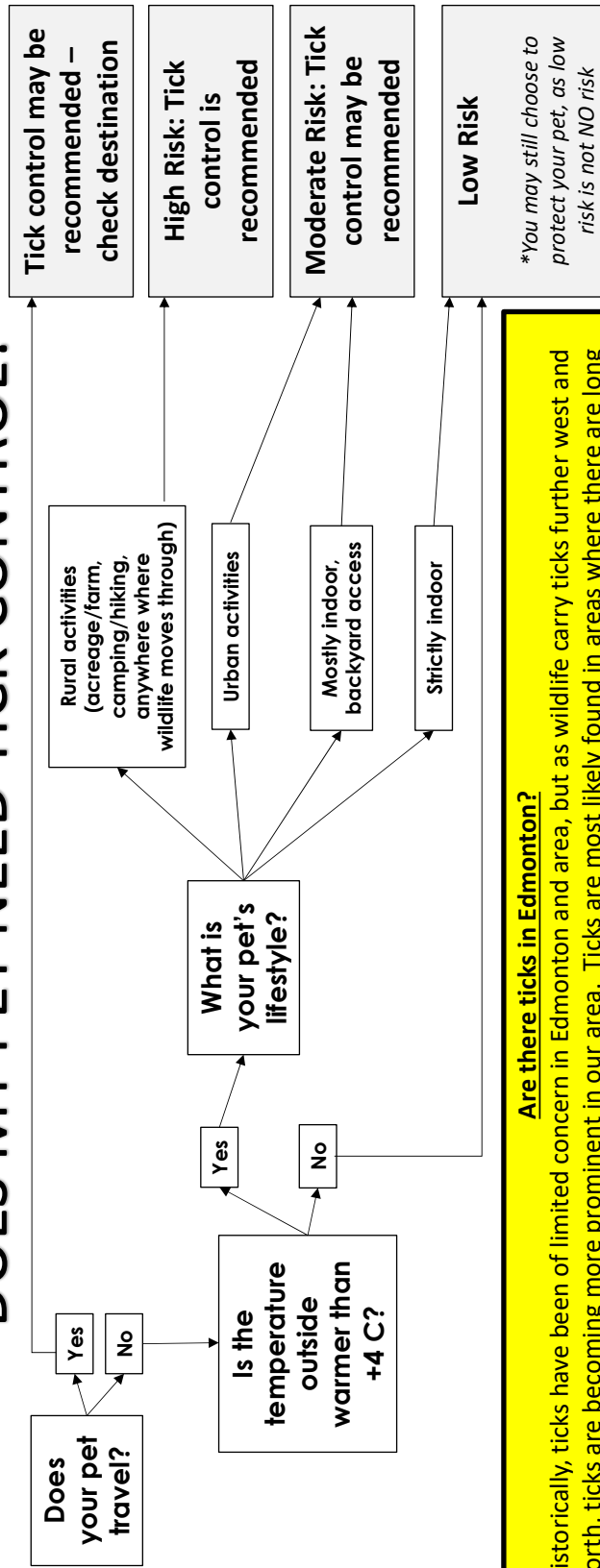
What worms does deworming target?
 Roundworms (most common), tapeworms (a growing concern), whipworms, hookworms, heartworm (none in our area, but important for certain areas of travel).

Why do we care about who your pet contacts?
 Dogs can pass their worms to humans – we want to protect your pet AND the most vulnerable humans in their lives.

How does deworming work?
 Deworming doesn't prevent worms, but kills adult worms already in your pet. For this reason, recommendations are based on your pet's likelihood of being exposed to worms, and on your pet's risk of passing them to at-risk humans.

I haven't seen worms – does my pet still need deworming?
 You only generally see worms when there are high numbers present, and/or occasionally after giving deworming medication. By deworming, we hope to prevent pets from having enough worms to cause them problems.

DOES MY PET NEED TICK CONTROL?



Are there ticks in Edmonton?
 Historically, ticks have been of limited concern in Edmonton and area, but as wildlife carry ticks further west and north, ticks are becoming more prominent in our area. Ticks are most likely found in areas where there are long grasses, and where wildlife pass through, such as the river valley, parks, and rural landscapes; however, they can also be in well-groomed neighbourhoods and backyards. They cannot survive our cold winters, so they are primarily a concern in spring through fall.

Why do we care about ticks?
 Ticks feed on blood and in large numbers can cause blood loss. We are particularly worried about ticks because they can carry and transmit disease, such as Lyme disease.

Kitten Pack – Positive Veterinary Care

Historically, we have accepted that pets are fearful of the veterinarian – they spend only a small portion of their lives there, and more often than not, pets freeze or shake in fear, which is easy to accept for short periods of time. Those that react with “fight” more than “flight” had been forcefully restrained, muzzled and held to accept veterinary procedures, because we are bigger, stronger, and smarter than our pets – and we’re doing what is best for them, or so we thought.



We know better now. The new generation of veterinary care, through such programs as Low Stress Handling® and Fear Free®, aims to make the veterinary visits not only stress-free, but also positive. For some owners, this is a welcome change, but for others, we meet resistance, because sometimes stress-free and positive means lots of treats, going slower than you may be used to and taking more time rather than “just getting it done”, coddling pets, potentially repeated visits (eg. returning to the veterinary clinic after a break if a procedure is too stressful, giving anti-anxiety medications, and in some cases), sedation.

We aim to change the veterinary experience for our young patients by starting them off right. Positive experiences with lots of treats, toys and catnip while in the veterinary environment helps to create positive memories in a setting that may otherwise be scary. Socializing kittens to veterinary procedures, with positive reinforcement to create a positive association, helps to prevent fear and anxiety in the future. **Identifying early signs of excessive fear or anxiety in kittens is also very important in early intervention for our young patients.** Although we’re not yet commonplace, the veterinary industry is also working on strategies for “[Cooperative Care](#)”, where pets are trained proactively to offer themselves for veterinary procedures willingly, to not only to CHOOSE to be involved but enjoy doing so.

Cats perhaps more than dogs are known for being fearful at the veterinary clinic, and for that reason, there are many resources targeted at making the experience more positive for them.

See these resources for how you can help make travel and veterinary visits as positive and stress-free for your cat:

General resource on [lowering stress levels in veterinary patients](#). [Reducing stress in cats](#), with emphasis on the trip to the clinic. [Getting your Cat to the Vet](#). [Transport of Cats](#). [Fear Free Happy Homes](#).

Positive Veterinary Care can only be successful with the support of pet owners like you! Performing exams at home can not only help identify concerns earlier, but also gets your kitten familiar with being handled in this way.

Nail Care and Grooming

Many pet owners find nail care stressful, whether it be because they don't know where to start, or because their pet is fearful or aggressive for nail care. We hope to set you and your pet up for success and provide you with the confidence to maintain your pet's nails.

General tips for introducing nail care:

1. Introduce nail care early.
2. Break the process of nail trimming into small components, and progress through the steps **SLOWLY, and at your pet's pace**. [This video](#) and [this handout](#) break down the steps for you (similar procedure for cats as with dogs, except dremmels aren't generally used in cats).
3. Use reinforcement (food/treats work best) whenever handling feet and trimming – **treats should start before you start, and end after you are finished, such that your pet is engaged in a treat for the entire duration of nail care**, including handling and trimming.
4. **Incorporate nail care into your everyday life**, so it does not feel like a chore, and so that you are able to perform nail care regularly. For example, perform nail care while watching TV in the evening.
5. Less is more – **use the least amount of restraint possible** – ideally, none.
6. For nail clipping, **have your veterinary team perform a demo** for you, to familiarize yourself with the best tools and technique to use on your pet.
7. For long-haired cats, improve your visibility by holding back or trimming the hair around your pet's nails.
8. Listen to your pet, and be their advocate. **If your pet shows ANY resistance towards nail care, STOP – DO NOT PUSH!** This goes for others providing your pet with nail care too – such as the groomer or veterinary team. The temptation to “just get it done” is common in pet care and particularly in nail maintenance – but even a single negative experience can poison your pet to future nail care, and make it significantly more difficult in the long run. **Signs you may need to take a step back, increase value of treats, change your strategy, or seek advice from your veterinary team/a trainer include:**
 - i. Exhibiting signs of anxiety (ears back/tail tucked, pupils dilated, freezing, trying to escape) when nail equipment is brought out or during nail care; and/or
 - ii. Pulling back on the foot when it is held or reached for.
9. **Ask for help** –if you or your kitten are struggling, or if you simply aren't comfortable performing nail care on your own, your veterinary team is here to support you.

Grooming

While some breeds may have low-maintenance coats, others require regular brushing, and many benefit from regular visits to a groomer. If you aren't sure which your pet is, consult with your veterinary team. As with nail care, grooming should be introduced early, positively, and at your pet's pace. If your pet is likely to need professional grooming throughout their lives, schedule short puppy visits with the groomer of your choice, and ensure they introduce grooming in a positive way, without pushing pets through negative emotions to get the job done.

Bathing requirements are variable across individuals. Many pets only require a bath after becoming dirty or smelly. Others, such as those who develop skin disease, may need baths more frequently. Many felines don't tolerate baths well – mousse products may be used as an alternative to bathing.

The “Dramatic” Pet

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A pet's reactions to attempts at grooming and nail care can seem disproportionate to what is being done. *Why do so many pets fight "spa" procedures?* In order to understand this, we first need to understand our pets' perspective – this allows us to proactively manage common challenges *before* they become a problem. There are many reasons why pets may seem "dramatic", but remember: their responses are entirely proportionate to what they are experiencing from their perspective.

- ❖ **The paws and face of pets are extremely sensitive** – there is a high number of touch sensors in the paw, and near the ears, eyes, nose and mouth. This increased sensation helps to protect important senses. They may be ticklish, and if they are touched suddenly, or if anything uncomfortable or painful occurs in these areas, the intensity of these sensations is significantly higher than anywhere else.
 - Start touch at the neck, shoulder or hip, where pets are less sensitive, and slide touch gently towards more sensitive areas.
 - Handle sensitive areas gently and considerately. Avoid squeezing or pinching. Take care not to bend whiskers or pull hair.
- ❖ Traditionally, we've placed pets in positions that are more comfortable to us and not the pet. **Limbs may be pulled or bent in unnatural ways** in order to visualize the nails better, and **excessive restraint** may be used to keep the pet still. This is particularly true in cats, where handling is often more stressful than nail trimming, and even more so in elderly cats, who often have osteoarthritis.
 - Perform nail care and grooming in a position your pet finds comfortable and natural. Most cats prefer laying down, while others may prefer to be held.
 - Rather than holding in place, use a rolled towel to discourage forward movement, or offer a towel for them to hide under, and bring the feet only from under the towel, one at a time.
 - Hold limbs in natural positions – avoid pulling limbs sideways from the body.
 - Ensure the surface you're working on has traction – avoid slippery surfaces or cover with runner mats, yoga mats or bath mats. Warm surfaces, such as a towel fresh from the drier, are also often appreciated by cats. Consider releasing feet between nails or intermittently when grooming.
 - If your pet shows any struggle, release them – they'll feel like they can escape if they need to, and are more likely to voluntarily stay put.
- ❖ **Grooming tools** aren't scary at first, but may **become scary** once they are associated with scary sounds or previously negative experiences. The sight of nail trimmers tools may predict scary things to come.
 - Introduce grooming tools when off and not in use – place the tool where your pet can approach and investigate them freely, and reward when they do.
 - Introduce noises at a low intensity (farther from the pet) and offer rewards to create a positive association, then bring the tools closer at the pet's pace. *Tip – nail clippers cutting uncooked spaghetti resembles the sound of clipping nails nicely.*
- ❖ **Overgrown nails are even more sensitive**, as they are painful to walk on and become hypersensitized to any sort of touch. Particularly in elderly cats, nails may become so overgrown that they embed in the paw. Older cats also may lose the ability to retract their nails, causing them to catch on walking surfaces and stuble or injure themselves. Similarly, prolonged lack of grooming (and self-grooming in older cats) can result in mattings which pull and pinch when manipulated, and skin ailments. This can also affect how they walk or move, leading to orthopedic issues, and the pet may develop a fear of being touched in any way, as touch may inadvertently result in pain. Grooming and nail care becomes a worsening cycle where pain → worsening resistance to being handled and trimmed.
 - Start grooming and nail care early, and perform as often as you are able. This may mean trimming one nail or brushing for a few minutes per day for some pets – and that's okay.

I already have a pet who is fearful or resistant to grooming, nail care, or both – now what?

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- ❖ **Change the tool, environment, or predictors and start over** – for example, change the colour of nail trimmers, and move from the floor to the couch.
- ❖ **Work on [desensitization and counter-conditioning](#)** – this involves changing your pet’s emotional response to grooming and nail care from negative to positive. This process is similar to that of initial introduction, but may require smaller steps, and often is a slower process to undo previous negative experience.
- ❖ **Introduce [cooperative care training](#)** – pets are more willing to participate in grooming and nail care when they have a choice and a means of communicating “stop, I am overwhelmed” or “continue, I am comfortable”.
 - Create a Treat-Ment Station ([video](#)), [Train a Chin Rest \(video\)](#), [Train a Bucket Game \(video\)](#). Note – these can be adapted to training in cats.
- ❖ **Involve an [experienced, positive trainer](#)** – all above strategies are most successful when pursued with the guidance of a good trainer.
- ❖ **[Involve your veterinary team](#)** – nails can be trimmed back thoroughly using pre-visit medications or supplements, pain medications, and/or sedation, while working on a plan to make nail care more regular.

Kitten Pack – Spay/Neuter

Traditionally, veterinarians have recommended spaying and neutering be performed from 5-6 months of age or earlier. More recent research suggests it may be beneficial for MALE kittens to wait until they are fully grown, for benefits in both orthopedic and urinary health, though the research at this time is not strong. In general, I recommend:

- Female cats be spayed prior to their first heat cycle – generally at 5-6 months.
 - Cats in heat are DESPERATE to find a mate, and are undesirable roommates while in heat.
 - Most significant **decreased risk mammary cancer** when spayed prior to first heat.
 - 90% mammary cancer in cats is malignant, or can be transferred to other parts of the body such as the lungs, and may become fatal.
 - Male cats can be neutered at 6 months, or once they are fully grown, depending on owner preference.
 - There MAY be a decreased risk of feline urinary disease when male cats are neutered later. Feline urinary disease in male cats is unique, in that their urinary tract may become blocked or obstructed, which may become life-threatening. Evidence of reduced risk is present in the literature, but some clinicians feel the evidence is weak.
 - There MAY be a decreased risk of a specific hip-based orthopedic disease. In my experience, this disease is uncommon.
 - Consider earlier neutering if undesirable testosterone-related behaviours develop (marking, aggression) or if access to an intact female cat is possible (eg. sibling or other intact female in the household, or access to outdoors).
 - Neutering does not resolve marking behaviour in all cases, but earlier neutering may increase chances of resolution if competition-based.
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