



Schedule for Kitten Visits

VISITS	REGULAR HEALTHCARE	PROCEDURES
FIRST VISIT: Comprehensive Examination and Consultation (at adoption)	<ul style="list-style-type: none"> • Full physical examination Weight + Body Condition Scoring instruction Lifestyle assessment Behavioural counseling Nutritional counseling Pet Insurance discussion Flea prevention discussion Zoonoses discussion Grooming and oral care introduction 	<ul style="list-style-type: none"> • Fecal lab test for parasite eggs Vaccination (if needed) Deworming (if needed) Nail trim Trial Pet Insurance Sign-Up
SECOND VISIT: Comprehensive Examination and Consultation (3-4 weeks after First Visit)	<ul style="list-style-type: none"> • Full physical examination Weight + Body Condition Scoring Ovariohysterectomy or Neuter +/- declaw discussion Pre-Anaesthetic bloodwork discussion Behavioural counseling Nutritional counseling Toxin awareness 	<ul style="list-style-type: none"> • Vaccination (if needed) Deworming (if needed) Nail trim
THIRD VISIT: Comprehensive Examination and Consultation (3-4 weeks after Second Visit)	<ul style="list-style-type: none"> • Full physical exam Weight + Body Condition Scoring Behavioural counseling Nutritional counseling 	<ul style="list-style-type: none"> • Vaccination (if needed) Deworming (if needed) Nail trim Microchip if appropriate
Ovariohysterectomy (6 months) or Neuter (6 months)	<ul style="list-style-type: none"> • Post surgery instructions Di.e.t assessment 	<ul style="list-style-type: none"> • Pre-Anaesthetic bloodwork Fecal lab test for parasite eggs

<p>First Annual Examination and Consultation (at 16 months of age)</p>	<ul style="list-style-type: none"> • Full physical examination Weight + Body Condition Scoring Nutritional counseling Flea prevention if needed Behaviour counseling 	<ul style="list-style-type: none"> • Fecal lab test for parasite eggs Vaccination Deworming Nail trim
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LIST OF TOPICS FOR YOUR KITTEN'S FIRST VISIT

Body Condition Scoring

Body Condition Scoring System

Deworming: Strategic Deworming for Internal Parasites - Cats

Feline Lower Urinary Tract Disease (FLUTD)

Fleas

Dental Care [Oral Care for Kittens, Tartar Prevention in Pets,

Brushing

Teeth]

How to Encourage Your Cat to Drink Water

How to Transition Your Cat to a New Diet

Litter training

Nutrition [The Basic Nutrients, Nutrition as Preventive Medicine] Pet

Health Insurance, Pet Health Insurance - How Do I Decide?

Rabies

Scratching Post Training

"Smart Owners Smart Pets" Seminar Series



Supplies You May Need for Your Kitten
Tick-Borne Infections: Lyme Disease and More
Toxoplasmosis
Vaccinations - Cats

Zoonoses

BODY CONDITION SCORING

What is Body Condition Scoring?

Body condition scoring is a subjective assessment of body composition that was originally developed by livestock producers to estimate the growth and development of sheep and cattle - animals too big (and often too unruly) to be weighed on a scale.

Body condition scoring is a simple, hands-on technique that owners and members of the veterinary team can use to estimate the relative proportions of muscle and fat on a pet's body. A body condition score (BCS) can range from 1 (emaciated) to 5 (grossly obese). Ideal is a 3.

It is important to understand that maintaining the ideal BCS for your pet will be associated with significant health benefits. In dogs, these may include (from a Purina Pet Care Center study) a longer lifespan, fewer signs of aging, and a delayed onset of arthritis and other chronic diseases.

Why Can't I Just Weigh My Dog or Cat?

At Centennial Animal Hospital, we will generally weigh your pet every time you come to visit. We will compare that weight with previous recorded weights to see if there have been any significant changes. The fact that your dog may weigh, say 50 lbs, is not as important as the BCS, which helps us estimate what your dog SHOULD weigh. A dog who weighs 50 lbs and has a BCS of 1 really needs to gain weight. On the other hand, a 50 lb dog with a BCS of 4 needs our "Pounds Off Pets" weight loss program. Regular body condition scoring at home will help you to adjust your pet's food intake and exercise level to maintain a healthy weight, even if you cannot weigh your pet often.

How is Body Condition Scoring Done?

Body condition scoring is simple, fast, and easy... and best of all, you get to hug your pet! There are three steps involved.

1. Stand over your pet, and gently run your hands over his/her back, with your thumbs over the backbone, and your fingers on each side. It helps if your pet is standing and facing away from you. You are checking to see how easily you can feel the ribs and how much muscle is present over the back area. Muscle is firm, fat is not.
2. Stand directly over your pet as he/she is standing and look down. You should see an obvious waistline behind the ribs and in front of the hips (an hourglass figure).
3. Check your pet's profile as he/she is standing. You should see a clear distinction between the chest and the abdomen, with the abdomen "tucked up" behind the rib cage.

In the case of heavily coated pets, you will obviously need to use your hands more than your eyes, but the process is the same.



BODY CONDITION SCORING SYSTEM

Emaciated 1/5

Ribs, backbone, and pelvic bones all easily visible.
No apparent body fat.

Obvious loss of muscle mass.

Thin 2/5

Ribs and top of backbone felt easily.
Pelvic bones prominent.
Obvious waist and abdominal tuck-up.

Ideal 3/5

Ribs felt without excess fat covering.
Waist observed behind ribs when viewed from above. Abdomen tucked up when viewed from the side.

Overweight 4 /5

Ribs only felt with difficulty, under fat cover.
Fat deposits over back and base of tail.
Waist absent or barely visible from above and from the side.

Obese 5/5

Massive fat deposits over chest, back and tail base.
Waist and abdominal tuck absent.
Obvious abdominal distension.



STRATEGIC DEWORMING FOR INTERNAL PARASITES: CATS

GOALS:

- To keep our patients and their environments as parasite free as possible
- To prevent passage of parasites from pet or contaminated environment to human family members

We suggest STRATEGIC DEWORMING of all pets with adherence to the principles set out by the World Health Organization and The Centers for Disease Control.

Lifestage	Deworming Recommendations
Kittens	<ul style="list-style-type: none"> • Every 2 weeks until 3 months old • Monthly from 3 to 6 months of age, then based on risk • Fecal analysis should be performed multiple times during the first year of life
Adults and Seniors	<ul style="list-style-type: none"> • Outdoor cats, or cats that could possibly hunt (in or outdoors) should be treated two to three times per year • Fecal analysis should be performed at least once a year
Queens (moms)	<ul style="list-style-type: none"> • Treat with the kittens
Newly Adopted Kittens or Cats	<ul style="list-style-type: none"> • Immediately, repeat in 2 weeks then follow guidelines above • Perform fecal analysis upon adoption and then as per appropriate category above

Environmental Control - clean the litter box regularly.



Personal Hygiene - wash your hands after handling your pet or cleaning the litter box.

-Wear gloves when gardening if outdoor cats travel through your yard.

FELINE LOWER URINARY TRACT DISEASE (FLUTD)

Feline Lower Urinary Tract Disease (FLUTD) is a common condition that can be caused by infection, inflammation, or crystals in the lower urinary tract (bladder and urethra). This disease can affect cats of any age and sex but is more serious in males due to anatomical differences in their urinary tract.

A cat with FLUTD shows signs of urinary tract discomfort such as:

- urinating in inappropriate places
- frequent trips to the litter box
- frequent squatting and straining
- bloody or strong-smelling urine
- crying and/or licking the penis or vulva
- lethargy, decreased appetite, vomiting or weakness

Obstructive FLUTD occurs when crystals in the urethra block urine drainage from the bladder. When this problem occurs in male cats it is extremely serious and potentially fatal. It requires immediate emergency veterinary care.

Poor quality diets have been implicated as one of the major causes of urinary crystals and obstructive FLUTD, but there can be other factors.



You can reduce the risk of this serious condition by feeding your cat a high quality canned and dry food that is **RECOMMENDED BY YOUR VETERINARIAN**, and ensuring your cat always has access to clean fresh drinking water.

FLEAS

Fleas are a fact of life in Muskoka, so it is very common for us to see cats and dogs with flea infestations. In fact, if you are not using a flea preventive for your pet that goes outdoors, there is a very strong (greater than 90%) chance that they will contract fleas. Pets become infected through contact with other pets with fleas or by frequenting areas where other animals have been (either pets or wild animals such as squirrels, chipmunks, and foxes).

THE BAD NEWS:

Not only are fleas irritating to your pet, but they can also:

- transmit tapeworms.
- cause a severe allergic skin condition in susceptible pets. This Flea Allergy Dermatitis can cause hair loss and skin infections.
- cause anemia due to the volume of blood lost. Many fleas on a small, very young or debilitated pet can be especially serious.
- bite humans.

THE GOOD NEWS:

- New flea preventives are effective, safe, long lasting, and easy to use so that your pet never has to deal with the problems of fleas.
- The use of preventives means fleas do not build up in the environment.
- Flea treatments for the pet that does contract fleas can quickly control adult forms and prevent new infestations.

IMPORTANT POINTS TO REMEMBER:



- You must follow the flea product manufacturer's recommendations to gain control.
- We usually advise you to treat every 28 days for a minimum of 3-4 consecutive months.
- All contact pets must be treated appropriately.
- You may still see some fleas during this process, as some eggs will continue to hatch in the environment, but please discuss with us if you are continuing to see more than expected.

ORAL CARE FOR KITTENS

Most of us are very aware of our own teeth and oral health. We know about plaque and cavities and gingivitis. We visit our dentist regularly. Despite this awareness of human dental care, many people do not realize their pets are subject to the same problems.

Healthy teeth help make healthy pets. Since periodontal disease is the most common disease in dogs and cats and is preventable it only makes sense that we start an oral care program early in life to help prevent painful and unhealthy dental disease.

By two months of age, all your kitten's 26 deciduous (baby) teeth have erupted and the 30 adult teeth are forming under the gums. The deciduous teeth fall out between four and six months and by eight months the adult teeth should be fully erupted.

What can you do to prevent dental disease?

Regular veterinary examination of the mouth.

At each "Kitten Wellness Visit", we will examine your kitten's mouth to look for signs of disease. At the time of surgery for ovariohysterectomy or neuter and at every Wellness Visit thereafter (ideally annually, at minimum) we will examine the mouth, paying special attention to crowding, alignment of the teeth and jaws and proper eruption of all adult teeth.

Regular home examination of the mouth.

You can begin by starting to "flip the lip" at an early age. This lets you know what the normal kitten mouth looks like so that you are aware when things look abnormal. You will be able to quickly notice sore red gums, broken or missing teeth and to identify bad mouth odours. Regularly examining your kitten's mouth will make him more comfortable with handling so that tooth brushing becomes an enjoyable time for both of you.



Regular brushing and oral care.

Regular brushing is the most effective method of removing dental plaque.

Appropriate diet.

Diet can be a major factor in the development of plaque and tartar. Some special diets are available that have exceptional dental benefits in cleaning the teeth.

TARTAR PREVENTION IN PETS

Plaque is a gummy substance that forms on the teeth within a few hours after a meal. Within 24 hours, plaque begins to mineralize by combining with salts that are present in the saliva. As the plaque continues to accumulate and harden, it eventually forms tartar. Tartar can cause dental problems such as periodontal (gum) disease if not controlled.

Plaque and tartar are harmful to the teeth and gums:

- It serves as a place where bacteria can grow and multiply in the mouth.
- The bacteria and tartar cause inflammation of the gums (gingivitis), which often results in bleeding.
- Worsening gingivitis leads to periodontal disease, which leads to further inflammation.
- There is substantial scientific evidence that the bacteria on the tartar can be absorbed into the blood stream and deposited in various organs, including the heart and the kidneys.
- As tartar builds up along the gum line, it pushes the gums away from the roots of the teeth. As the gums recede, they expose the sensitive, enamel-free part of the tooth causing pain.

Eventually, if the tartar is not removed, it will cause the periodontal disease to progress, and the teeth will loosen and fall out.

How can I prevent tartar formation on my pet's teeth?

If your pet already has tartar buildup, a professional clean and polish by your veterinarian is required before starting a home care program.

Ways you can help reduce plaque and tartar buildup on your pet's teeth:

- Feed your dog or cat a veterinary-approved dental di.e.t



- Brush your pet's teeth at least twice weekly; daily would be ideal. This is one of the most effective ways to remove plaque before it turns into tartar. Use veterinary toothpaste that is safe for use in dogs and cats. Do not use human toothpaste.
- Use a daily oral rinse designed for dogs and cats.
- Offer your dog specifically designed chew toys and dental treats for dogs or cats that are designed to help reduce or remove mild tartar accumulation.
- Have your veterinarian perform a prophylactic dental cleaning every six to twelve months, or at the first sign of tartar buildup. Regular dental cleaning is as important in our pets as it is in people and will prevent irreversible damage to the gums and roots.



BRUSHING YOUR CAT'S TEETH

When should I brush my cat's teeth?

Teaching your cat to accept the brushing of its teeth will take some training but will be relatively easy once he is accustomed to the process. Daily brushing is most beneficial and will help to establish a routine for your pet. Brushing twice a week is acceptable if your schedule cannot accommodate daily brushing.

It is best to teach your cat to accept brushing while he or she is still a kitten. If you have an older cat, the process may take a little longer.

What steps do I need to follow to teach my cat to accept tooth brushing?

- Choose a quiet time and place to start the brushing. Hold your cat securely in your lap. The following steps will take time (days to weeks) to train your cat to accept. Be patient.
- Let him or her taste a little bit of toothpaste from your finger. Use flavoured veterinary toothpaste only. Do not use human toothpaste.
- Once the cat is comfortable with this, start by putting a small amount of toothpaste on your finger or a soft cloth, then rub over the cat's teeth in a back-and-forth motion. Be careful to stay on the outside surfaces of the teeth to avoid being bitten by accident.
- Graduate slowly to using a finger brush or continue with the soft cloth. Place your free hand over your cat's head with your thumb and index finger on opposite sides of your cat's upper jaw. Gently raise your cat's lip on one side and begin by brushing one or two of the cheek teeth. Brush in a circular motion. Start from the back and work toward the front of the jaw. To brush the lower teeth, you will need to open your cat's mouth just a little. This can be done by gently tilting your cat's head backward while holding onto his or her upper jaw with the thumb and index finger of your free hand.

The cat's abrasive tongue tends to remove plaque from the inner surfaces of the teeth, reducing the need for brushing these surfaces.

Remember - A cat's mouth contains plenty of harmful bacteria, so it is a good idea to wash your hands and the toothbrush thoroughly when you are done.

[Please see this helpful video on www.pethealthnetwork.com: [How to Brush Your Cat's Teeth](#)]

This client information sheet is based on material written by: Ernest Ward, DVM

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HOW TO ENCOURAGE YOUR CAT TO DRINK WATER

Your cat's ancient ancestors lived in the desert. Although cats have been domesticated for thousands of years, our house cats today are still excellent at conserving water and extracting water from their food (mice are 70-80% water, like all mammals). Even though you may see your cat drinking water often, most cats consume less drinking water than would be ideal,

As a result, cats may be predisposed to kidney and bladder problems resulting from overconcentrated urine and may be more prone to becoming dehydrated.

Some suggestions to encourage your cat's overall water consumption:

1. Feed canned food, in addition to dry. Canned food will spoil if left out for hours, so feed it at mealtimes and leave only measured amounts of dry food out for your cat to nibble on throughout the day.
2. Provide fresh water every day. Some cats prefer running water (i.e., a cat drinking fountain), room temperature water, or a shallow pan instead of a deep bowl (so their whiskers don't touch the sides of the container while they drink).

Some cats do not like tap water. Try:

- * refrigerating it
 - * filtering it (i.e. Brita pitcher)
 - * bottled water
 - * distilled water
 - * adding 1-2 drops of tuna juice or clam juice, and serving as water or ice cubes (always provide fresh, unflavoured water as well)
3. Keep your cat's food and water bowls away from the litter box area.
 4. Keep the food and water bowls clean. Stainless steel or ceramic bowls are recommended.

HOW TO HELP YOUR CAT MAKE THE TRANSITION TO A NEW DIET

It is best to offer 2 plates side-by-side, rather than mixing the old and new food. If your cat readily accepts the new food, gradually increase the percentage of the new food offered, and reduce the percentage of the old food offered over a period of 1-2 weeks.

Day 1 & 2: offer 75% old food and 25% new food

Day 3 & 4: offer 50% old food and 50% new food

Day 5 & 6: offer 25% old food and 75% new food

Day 7: offer 100% new food

Some cats do not accept a change of food readily. These cats may take 4 weeks or more to make the transition. If your cat does not readily accept the new food, use the following approach:

- start by offering the new food alone on a plate at a time of day when your cat is most hungry.
- if the new food is accepted, let your cat eat it and offer the old food and new food side-by-side at the next feeding. You can gradually offer less of the old and more of the new over the next few days.
- BUT, if your cat still refuses the new food when served alone, let your cat eat the old food. Continue to offer the new food first at each feeding and consider some of the following tips to encourage acceptance:

Other tips

1. Try offering the canned version of the diet.
2. Warm fresh or refrigerated canned food in a microwave-safe container in the microwave on HIGH for 5-7 seconds. Stir to ensure there are no hot spots. Cats prefer room temperature or "body temperature" canned food.
3. Petting a cat while it is eating will encourage appetite in some cats.
4. Divide the total daily amount of food into 3 -6 smaller meals.
5. Add flavour enhancers to the food: sprinkles of dried oregano or catnip, or add chicken broth or tuna juice (please first ask the veterinarian if this is suitable given your cat's individual health concerns) Note:

- Most cats prefer a wide, flat dish for food and water instead of a bowl as they do not like their whiskers to touch the sides of the container.
- The feeding area should be a quiet area of the home, free of distractions.

CATS SHOULD NOT GO WITHOUT FOOD FOR MORE THAN 24-48 HOURS.

If your cat has stopped eating or has vomiting or diarrhea, please call to let us know.

If your cat will not accept the new food despite your best efforts, please tell us as we can usually suggest an alternative diet to try. A bowl of fresh water should be always available.



LITTER BOX TRAINING

Cats are clean by nature but giving your kitten the best environment in which to eliminate will increase the likelihood of early success and minimize the chance of litter box problems in the future.

What you'll need:

Litter - many types are available including clay and clumping. Try to use the same as was used in the previous home. Unscented is recommended.

Litter box - plastic is most easily cleaned. The sides should be low enough for the kitten to climb in and out easily. One box per cat is recommended. Covered boxes may reduce odour and keep the curious family dog out, but some kittens prefer open ones. You can easily make a litter box from a large volume "Rubbermaid"-type container by cutting a hole about halfway up on one end for your cat to enter.

Location: - a quiet area of the home with little traffic, but easily accessible for the kitten and for clean-up.

Training: -If your kitten is not using the litter box when you bring it home, you may have to gently lift your kitten into the box if you see the signs that it is ready to eliminate (i.e., meowing, turning in circles, pawing at ground). Leave it, and let it do its business alone. You can expect your kitten to be ready to use the litter after waking, eating, or exercise.

Praise: - food treats and verbal praise immediately after the kitten is finished in the litter box.

Supervision: - restrict the kitten to a cat-proofed room with its litter box when you are not able to supervise, at least for the first 2 weeks.

Cleaning: - scoop at least once per day. Completely clean once per week for clay litter and every 2-4 weeks for clumping litter, using hot water. Unscented soap may be used if rinsed well.

Litter box Don'ts:

- Don't frighten or scold your cat when in the box
- Don't administer medication to your cat when in the box
- Don't place the box next to a noisy appliance (i.e., washing machine)
- Don't use harsh chemicals to clean the box
- Don't abruptly change location of box or type of litter

Oops!: to clean up accidents, use a commercial odour neutralizer and deter the kitten from the area with 2-sided sticky tape or a plastic carpet runner (nubs up). Punishment does not work.

Problems: -if you have adopted the above measures and are still experiencing difficulty, contact your veterinarian who may need to examine your kitten and do tests to ensure there is no medical problem.

THE BASIC NUTRIENTS

Nutrition is one of the most important considerations in the maintenance of health and wellness and is key to the management of many diseases in your pet.

Most advertisements focus on ingredients, since they are what people understand. BUT, ingredients are only the "delivery truck". It is the nutrients, or the "cargo", and how available they are to the pet that makes the difference.

The Six Basic Nutrient Groups are: protein, fat, carbohydrate, water, vitamins, and minerals.

Energy (calories) comes from proteins, fats, and carbohydrates.

1. Proteins

- are made up of amino acids, just like words are made up of letters.
- the amino acids that the diet provides to the pet that are what's important, not the source of protein (i.e., beef vs chicken, or whole meat vs poultry meal).
- "essential amino acids" must be provided by the diet because the body cannot make them on its own.
- too much protein or too much poor-quality protein is detrimental to health.

2. Fats

- are the most concentrated energy source (they provide more than twice the calories per unit than proteins and carbohydrates)
- provide "essential fatty acids", including "omega-3's" and "omega-6's", which play a role in inflammation.

3. Carbohydrates

- include simple (i.e., glucose) and complex (i.e., starch, fibre) sugars
- some carbohydrates cannot be digested (i.e., insoluble fibres like cellulose).
- any carbohydrate source that can be digested, will provide glucose for energy [i.e., wheat vs corn - neither one is better, assuming they are both of high quality. BUT ground and cooked carbohydrate is digested better than raw. This is why corn meal is used instead of raw corn.]

4. Water

- is the most important nutrient of all. Humans and their pets can only survive a few days without it.
- dry pet foods contain 10-12% water. Canned foods contain 72-82% water.
- feeding canned food is one way to increase water intake
- ALWAYS provide fresh water for your pet daily

5. Vitamins.

- are either water-soluble (dissolve in water) or fat-soluble (dissolve in fat)
- water-soluble vitamins are generally safer than fat-soluble vitamins because if too much is given, the excess will be eliminated in the urine
- excess fat-soluble vitamins are stored in the fat, and can easily become toxic



6. Minerals.
 - some examples are calcium, phosphorous, magnesium, sodium
 - the body needs them to function, but too much of a certain mineral may cause disease (i.e., too much calcium in puppy diets can lead to joint problems in larger breed puppies, and excess phosphorous in a diet strains the kidneys).
- it is expensive for the food companies to remove the excess minerals, and not required, so many pet foods contain levels that are too high.
- higher quality foods are less likely to contain these dangerous excesses.

PLEASE ADVISE YOUR VETERINARIAN IF YOU ARE SUPPLEMENTING YOUR PET'S DIET WITH ANY VITAMINS OR OTHER SUPPLEMENTS.

WHAT DO THESE NUTRIENTS DO IN THE BODY?

NUTRIENT	FUNCTION
Protein	The main component of body tissues, like muscles, blood (proteins, enzymes, hormones), skin, organs, hair and nails.
Fats	Fats absorb, store and transport vitamins, moisturize skin and coat, make healthy pet food taste great, and supply energy. Some fatty acids are required for metabolism (chemical processes vital for body function).
Carbohydrates	Simple carbohydrates and starches provide energy for the body's tissues. Fibre promotes normal intestinal function.
Water	Involved in almost all functions needed for survival.
Vitamins	Assist in maintaining the body's metabolism and are key components in the development and maintenance of body systems (i.e., bone).
Minerals	Required for the development and maintenance of healthy skin and hair and bone. Assist in maintaining the body's metabolism.

NUTRITION AS PREVENTIVE MEDICINE

The old adage, "you are what you eat" applies to our pets just as it does us. If you eat a complete and balanced diet appropriate for your health needs and lifestyle, then you will increase your chance of living a healthier longer life with less disease. Many veterinary nutritionists go a step further to point out that what our pets eat may even have a greater impact considering that our pets age much faster than we do. We are often influenced by information we see online or in advertisements and commercials. This information may not be based on solid nutritional science, and may be more of a marketing tool to sway our decisions. One key point to understand is that the nutrients provided by the ingredients listed on a commercial pet food label are more important than the ingredients themselves, even though certain ingredients may appeal to us more (i.e. "deboned chicken" sounds more appealing than "poultry by-product meal", when in fact the latter may be more nutritious).

The following are some important ways that the food you feed your pet can help prevent disease:

1. **Obesity Prevention:** if a pet eats more calories in a day than it's body needs for fuel, excess fat will be stored. Excess calories may be due to treats, feeding too much food, or feeding a food too high in calories. We recommend your pet eat a food appropriate for its lifestage and activity level. If you read the fine print on many pet food labels, you will discover that the food you are feeding is formulated for "all lifestages" which means in effect it is higher-calorie growth food (the puppy/kitten lifestage has a higher caloric requirement than the adult lifestage). Simply reducing food amount or calories to achieve weight loss can result in a hungry, begging pet; appropriately formulated weight loss foods are better for this purpose. These foods usually use fibre to help make the pet feel more full on less calories. Prevention of obesity is always top-of-mind when we make a food recommendation for your pet.
2. **Dental Health:** a healthy mouth promotes a healthy body. Bacteria from the mouth can access the bloodstream through inflamed gums (gingivitis), impacting the whole body. Daily tooth-brushing is the best way to prevent dental disease, while some pets additionally need cleaning and polishing under anaesthetic for ideal dental health. Dental diets and chews for dogs and cats are available to help as well. The products we recommend have been tested to ensure they have significant effect. Allowing dogs to chew on



antlers or bones is not recommended because the risk of tooth breakage is higher than any benefit that may be seen.

3. Joint health, Immunity, Organ Health: certain foods and nutrients can have an impact on many systems in the body.

For example, diets higher in omega3 fatty acids from fish oil sources can help reduce inflammation in the joints, and the development of arthritis. Large-breed puppy diets with the correct caloric density, fat level, and ratio of calcium to phosphorus can help prevent joint disease in at-risk breeds. Antioxidants can help support immune function and improve response to vaccinations. Excesses of certain nutrients can, over time, lead to faster organ wear-and-tear (eg. excess phosphorus can lead to kidney disease earlier than would otherwise be seen).

Please ask us for a nutritional recommendation for your pet!



PET HEALTH INSURANCE

In the case of serious accident or illness, health insurance allows for the provision of the best possible care and ensures that finances do not compromise the life of your pet.

Fortunately, there are many health insurance plans for pets available in Canada. Most pet health insurance plans do not cover preexisting health conditions (conditions already noted by a veterinarian in your pets' medical record). The best strategy is to enroll your pet as soon as possible after adoption, when it is still in good health. There are many types of plans, with varying degrees of coverage. Some plans have a deductible amount and some charge higher premiums for breeds that are more prone to health problems. The choice of coverage is yours.

Our hospital does not receive any financial benefits from the pet insurance companies. When an insured pet requires medical care, the pet's owner is responsible for payment to the hospital at the time of service, and then a claim is made by the pet owner to the insurance company. We will assist you in completing any necessary paperwork at no charge and ask only that you retain copies of pertinent invoices and allow us adequate time to fill out the forms.

Below are some examples of commonly encountered unexpected expenses and minimum associated costs we want you to consider:

DOGS		CATS	
Accident or Illness	Minimum Costs**	Accident or Illness	Minimum Costs**
Ear Infection	\$ 165	Infected wound (abscess)	\$ 175-200
Vomiting and diarrhea requiring 2 day hospital stay	\$ 1800	Surgery to remove a foreign object from the intestinal tract if present (common examples include: toys, earplugs, string)	\$ 2600
Surgery to remove a foreign object from the intestinal tract if present (common examples include: fabric/clothing, toys, grass)	adds \$ 2300 =\$ 4100		
Cut requiring stitches	\$ 1000-1350	Cut requiring stitches	\$ 750
Remove a few porcupine quills under anaesthetic	\$ 275-350	Urinary blockage with 2 day hospital stay	\$ 1650

**includes HST (2020)

WE HIGHLY RECOMMEND HEALTH INSURANCE FOR YOUR PET



PET HEALTH INSURANCE - HOW DO I DECIDE?

Pet health insurance (pet insurance) helps cover the cost of medical expenses and is definitely beneficial for unexpected medical events that are difficult to budget for.

When considering pet insurance, you need to decide what aspects of veterinary care you want covered. Companies will generally offer coverage for accidents, or accidents and illness. Some will also include wellness coverage (annual exams/vaccines) and/or dental care. Some companies also offer supplementary add-on options (i.e., for hip dysplasia in dogs).

Keep in mind that most insurance companies pay by "reimbursement". This means you pay the veterinary invoice, submit your claim, and then are paid back by the insurance company (usually 70% - 90% of the total). Some companies include sales taxes in this reimbursement and others do not. In some circumstances you can ask the insurance company to pay the veterinary hospital directly, but this is not generally available unless pre-arranged.

[Insurance Terms you Should Know](#)

Premium = the fee you pay for the insurance policy (usually monthly).

Deductible = the amount of money you must pay per claim BEFORE the provider will pay any expenses.

Co-pay = the portion of your claim that you are responsible for paying.

Maximum payout = the maximum amount of money the insurance company will reimburse you.

Waiting period = a short period of time between the date you sign up for the insurance policy and the date it takes effect. Claims made in this period are not covered.

Pre-existing condition = a medical condition diagnosed before the insurance policy is put in place. Usually, pre-existing conditions are not covered by the insurance company and are "excluded" from the policy. Do not wait to sign your pet up for insurance until after they are diagnosed with a condition.

Breed Exclusion = certain hereditary illnesses common to a specific breed that will not be covered in the policy.

What questions should I ask when deciding which insurance plan is best for me?

1. Do I need pet insurance at all? Can I cover "worst case scenario" pet care costs on my own?
2. What illnesses, accidents, or injuries are covered?
3. Do I want wellness care, dental care, or any other add-on coverage?
4. Does anyone I know use this company, and would they recommend it?
5. Is there a maximum payout limit?
6. Do I pay the deductible per incident or per year?
7. Will the premium or deductible increase if I make a claim or as my pet ages?
8. Will there be any exclusions (medical expenses not covered)?
9. Will bilateral conditions be covered? (i.e., left knee and right knee)
10. How do I make a claim? Do I need to pay the veterinary bill upfront?

Key Points:

- ✓ Do your research.
- ✓ Ask the above questions before you buy. ✓ Make sure you read and understand all the exclusions, requirements, and coverage in your policy.

A pet insurance trial offer may be available for puppies, kittens, and young to middle-aged pets after a veterinary examination. Take advantage of this option. Under the trial, your pet will have some coverage for accident and illness while you decide which company and plan is right for you.



RABIES

Worldwide, Rabies is the most feared zoonosis (a disease that is passed from animals to humans). It is so feared because it is invariably fatal to any person who contracts the disease. The good news is that rabies can be prevented in our pets by vaccination. There are now highly effective vaccines can provide adequate protection for up to three years when given in the proper manner and at appropriate intervals.

We have a plan at Centennial Animal Hospital and Gravenhurst Veterinary Services to protect our clients, their pets, and our practice team from Rabies.

Rabies Prevention Plan:

- Use proven vaccines and an appropriate vaccination schedule tailored to the individual pet.
- Vaccinate all pets for Rabies. Even indoor pets can be exposed to Rabies via small mammals gaining access to their home (for example, bats) or by exposure to the saliva of a rabid animal on the coat of other household pets who do go outdoors (if that pet has contact with a rabid animal, it can bring infective saliva into the house on its hair coat).
- Enforce our Rabies vaccination policy with respect to unvaccinated pets, rabies suspects and bites from pets or animals.
- Educate the public about wildlife reservoirs of Rabies; in our area foxes and bats, in other areas, raccoons and skunks. Ensure that people know:
 - * never approach wildlife that is acting in an unusual manner
 - * never handle sick or dead wildlife without taking appropriate precautions
- Encourage people to educate their children about the dangers of approaching wildlife or any pet without permission. Be sure children know to tell their parents if they are bitten or scratched by a wild animal or pet.

Who to contact and when:

- 1) Potential Human Exposure (bitten or scratched by wildlife or cat or dog). Contact your physician and the Simcoe-Muskoka District Health Unit at 705 684-9090. See the [health unit website](#) for more information.
- 2) Suspected rabid wildlife, BUT there has been NO pet or human exposure. Contact the [Ministry of Natural Resources and Forestry Rabies Hotline](#) at 1-888-574-6656.
- 3) Potential Dog or Cat Exposure (bitten or scratched by wildlife or another pet). Contact your veterinarian and the [Ministry of Agriculture, Food and Rural Affairs Contact Centre](#) at 1-877-424-1300.
- 4) Sick or dead BAT, no Human or Pet Exposure. Contact the Canadian Cooperative Wildlife Health Centre at 1-866-673-4781.



SCRATCHING POST TRAINING

Cats have a natural desire to scratch. Cats will scratch while stretching, to scentmark their territory, and to condition their claws. The best way to prevent destructive scratching is to train your cat to use an acceptable and suitable scratching surface. It also helps to trim your cat's nails regularly.

Equipment: material selection is often trial and error: some cats prefer carpet, but others prefer sisal, a nubby fabric, cardboard, or even bare wood. A post must be tall enough for the cat to stretch up on it when it is standing on its hind legs, and sturdy enough so it doesn't topple over. Some cats will prefer a horizontal scratch-pad to a vertical post. Carpeted cat trees and play structures are a great way to provide a scratching surface and entertainment center, especially when placed near a window with a view.

Training to a scratching post or pad:

Ideally, place one scratching surface near the cat's sleeping area, and one in a higher-traffic area of the home (cats will mark their scent while scratching, especially when people enter the home).

Encourage your cat to scratch by rubbing some catnip or placing a few food treats on the scratching pad or post and reward your cat for coming near it. Repeatedly reward with food treats and praise for scratching the post. Another product to consider when training a cat to a post is Feliscratch. This is a pheromone liquid you apply to the post to encourage the cat to scratch in that location.

Please visit: <https://catfriendly.com/cat-care-at-home/living-clawed-cat/> for more helpful tips.



SUPPLIES YOU MAY NEED FOR YOUR KITTEN

- high quality kitten food and treats
- food and water bowls (stainless steel or lead-free ceramics recommended)
- measuring cup for food
- lid for cans
- toothbrush and toothpaste for cats
- harness and leash
- safe and interactive toys (see below)
- litter box and litter
- litter scoop
- stain and odour care
- travel carrier (easily removed top/sides is ideal)
- brush/comb
- shampoo/conditioner for cats
- nail clippers
- scratching post or pad, cat tree
- method of identification (even indoor cats may "sneak" out!)
- bed/bedding
- kitty herb garden, cat nip (in moderation)

Suggested Toys

- bouncy balls (not too small), ping-pong balls, crumpled paper or aluminum foil balls, whiffle golf balls
- empty cardboard boxes (staples removed or taped over) or paper bags
- toys on rods, cat dancers, cat tracks
- tunnels (i.e., made from air conditioning tubing)



TICK-BORNE INFECTIONS: LYME DISEASE AND MORE...

Muskoka is now host to an increasing number of ticks, and consequently we regularly monitor dogs for tick-borne infections. The IDEXX 4DxPlus® blood test, in use at our practice, screens dogs for Lyme Disease, two types of Ehrlichiosis, and Anaplasmosis. This test also identifies the mosquito-transmitted Heartworm infection.

DISEASE

Dogs and people are susceptible to Lyme disease and other tick-borne diseases. Cats are less susceptible, and fortunately the species of ticks that can cause more serious disease in cats are not established in our area. Cats usually groom ticks off themselves before they attach, but with ticks becoming more prevalent, we are now seeing many cats with ticks attached to their head and face after coming in from the outdoors.

TICK BITES

Most pet owners are unaware their pet has experienced a tick bite. The tick is very small when it first attaches, so it can be difficult to find underneath the fur. The tick will bury its head just underneath the skin and stay attached at that location for approximately 5-7 days. This is not painful for the pet, so there may be no outward signs of attachment. While feeding there, the tick's body will slowly engorge with blood, becoming easier to notice as the days pass. At full size, ticks are commonly mistaken as a wart or similar skin lump. The tick then drops off, leaving a small scab or swelling that usually heals quickly. The rash or "bull's-eye lesion" seen on people is uncommon in dogs and cats. The risk of a tick bite increases in the warmer months, spring through autumn, as this is when they are most active. In the spring, ticks start to become active once we have experienced a few days over 4° C.

TICK LIFECYCLE

Ticks have 4 distinct life stages:

1. Egg
2. Six-legged larva
3. Eight-legged nymph
4. Adult

SIGNS

Tick-transmitted infections in dogs may take weeks to months to cause symptoms or may never cause illness at all. The most common symptom of tick-borne illness in dogs is lameness, particularly lameness that shifts from one leg to another. Other typical signs can include fever, lethargy, poor appetite, vomiting, and diarrhea. Rarely, these infections can affect the nervous system, the heart, and the kidneys.

TICK PREVENTION AND REMOVAL

The best way to prevent tick-transmitted infections is to check your pet thoroughly once daily and remove any ticks you find before they have the opportunity to pass along their infections. Ticks will typically "board" a passing dog or cat from low shrubs, bushes, and tall grasses.

Some tick prevention products for dogs are toxic to cats. We can recommend safe flea and tick prevention for cats that spend time outdoors.

If you find a tick, or suspect a "wart" is a tick, you are welcome to schedule a brief appointment with us to have the tick removed.

If you choose to remove the tick yourself, follow these guidelines¹:

1. Remove the tick as soon as you see it.
2. Use fine-tipped tweezers to firmly grasp the tick close to the skin.
3. With a steady motion, pull the tick away from the skin. Clean the skin with soap and warm water. Alternatively, follow the directions for using a TickTwister®.

Females deposit from 30006000 eggs on the ground. Males die shortly after mating, and females die shortly after laying eggs. The lifecycle completes in 2 months to 2 years, depending on the species. The larval, nymph, and adult stages all feed on the host's blood.

4. Avoid crushing the tick's body. Blood from the tick could be contaminated with infective agents.
5. Although it is not ideal, do not be alarmed if the tick's mouthparts remain in the skin. Once the mouthparts are removed from the rest of the tick, it can no longer transmit infectious agents.
6. If you accidentally crush the tick, clean your skin with soap and warm water or alcohol.
7. Place the tick in a sealed container or sealed plastic bag for disposal.
Avoid the use of flame, sharp objects, Vaseline, or other alternative remedies; they are inconsistent for success and can result in contamination or injury.

-Testing the tick to determine if it is carrying the Lyme disease bacteria is no longer paid for by the government, so is less often done, but is available at a cost if you wish.

-We can offer to examine the tick to advise you if it is the species of tick responsible for carrying Lyme disease.

Please contact our team if you would like to learn more about preventing tick-borne infections.
We are always happy to help you and your pet!



TOXOPLASMOSIS

General Information:

Toxoplasmosis is caused by a microscopic parasite called *Toxoplasma gondii*, which lives in animal tissues (i.e., brain, heart, muscle) in a cyst-form.

The cat is the primary host, but *Toxoplasma* can infect other mammals, including people. Cats contract toxoplasmosis by eating infected raw meat, infective cysts in feces, or by drinking contaminated water. Infected cats rarely show signs of illness. If illness develops, cats may present with diarrhea, fever, laboured breathing, enlarged lymph nodes, or eye inflammation. Occasionally the infection will prove fatal. Cats usually develop immunity to *Toxoplasma* sp. after the initial infection and never pass the organism again, unless their immune system becomes weakened. *Toxoplasma* sp. eggs passed in the cat's feces must incubate for at least 24 hours before they become infective cysts.

Other animals and people become infected by eating the cysts from feces or in raw or undercooked meat.

Public Health Significance:

In immunocompromised people, *Toxoplasma* sp. may cause a brain infection (encephalitis), but most healthy adults will have only a mild flu-like illness or be completely unaware that they have been infected.

In women who are pregnant and become infected for the first time, *Toxoplasma* sp. may cause stillbirth, neurologic disease, or eye damage in the unborn child.

A woman who is pregnant or plans to be should discuss being tested for antibodies to *Toxoplasma* sp. with her physician: ❖ if she has antibodies, then she has already been exposed and neither she nor her fetus is at risk if she becomes infected again, as long as she is not immunocompromised for an unrelated reason. ❖ if she does not have antibodies, then an infection could cause harm if it occurs during the pregnancy.

A person with a weakened immune system (i.e., undergoing chemotherapy), should discuss having a test for *Toxoplasma* sp. antibodies with their physician.

Cat Management in a Household with an Expectant Mother:

- ❖ Your cat's blood can be tested for antibodies. Two tests, 2-3 weeks apart are recommended. If infected, your cat can be treated for toxoplasmosis. Since cats only pass *Toxoplasma* sp. cysts in their feces for a limited time, testing your cat's feces is usually not warranted.
- ❖ Pregnant women should not clean the litter box. The box should be emptied daily by another member of the household. Pregnant women should take extra precautions when gardening, if there is a chance neighbourhood cats may have used the garden as a litterbox.
- ❖ Children's sand boxes should be covered when not in use.
- ❖ Cats should not be allowed to catch rodents or birds or to eat raw meat.
- ❖ Do not allow stray cats into the household.
- ❖ Wash your hands after petting or handling your cat.

Pregnancy does not mean that you cannot own a cat, but common sense should prevail. Eating raw or undercooked meat is probably a much more frequent source of human toxoplasmosis than contracting the disease from cats. Heating meat to at least 160°F kills *Toxoplasma* sp.



VACCINATIONS FOR CATS

A vaccine stimulates the immune system to produce antibodies which then protect against a specific disease.

Common (Core) Cat Vaccines include:

Panleukopenia (Distemper)

Feline Viral Rhinotracheitis (Herpesvirus)

Calicivirus

Rabies

Non-Core Vaccines

Feline Leukemia Virus

Chlamydia

Feline Infectious Peritonitis

Ringworm

We will consider your cat's lifestyle (boarding, travel, access to outdoors, other cats, or dogs in household) and breed idiosyncrasies to determine what vaccines should be administered and the number of boosters that will be required. After discussion, it may be decided that a non-core vaccine is appropriate for your pet due to an anticipated risk of exposure.

A strategic individualized vaccination plan will be formulated for your cat. Plans may vary from cat to cat and year to year. At each vaccination, the veterinarian will perform a physical examination to be certain there are no signs of illness. A healthy immune system is needed to give optimum response to vaccines. We will likely not vaccinate a cat who is ill, stressed, seriously underweight or heavily parasitized. We may delay vaccination in cats taking certain medications that can weaken the immune system response.

THE GOALS OF A STRATEGIC INDIVIDUALIZED VACCINATION PLAN:

- to vaccinate against only those agents to which an individual cat has a realistic risk of exposure
- to use the SAFEST and most effective vaccines
- to vaccinate each cat no more than necessary
- to conform to any legal requirements

CORE VACCINES CAN PREVENT THESE DISEASES:

Panleukopenia

Commonly known as feline distemper. A widespread and often fatal disease which may cause sudden onset of severe vomiting and diarrhea. It is especially dangerous in kittens, but fatalities can occur in adult cats.

Feline Viral Rhinotracheitis

A common respiratory infection of cats which can be fatal in kittens. Sneezing, decreased appetite, and fever, followed by a thick discharge from the eyes and nose, are often observed.

Calicivirus

An upper respiratory infection of cats with signs similar to rhinotracheitis. In addition, ulcers may be seen on the tongue and in the mouth.

Rabies

A fatal viral infection of the central nervous system that can affect all mammals, including humans. The virus is transmitted through the saliva of an infected animal.



ZOONOSES

Zoonosis (plural - zoonoses) is an infection or infestation that can be transmitted from animals to people.

Many people are aware of "headline-making" zoonoses, like Rabies and Avian Influenza. However, there are more common zoonoses that tend not to make the news but affect many more people each year. The Centers for Disease Control and Prevention estimate that between one and three million people in the US are infected with a zoonosis each year [Novartis Animal Health, 2006].

Anyone can contract a zoonosis, but the people most at risk include: the very young, the very old, and anyone who is immunocompromised (i.e., HIV/AIDS, chemotherapy, organ transplant recipient, diabetic, kidney or liver disease), or spends increased time in a higher-risk environment (i.e., animal care, dog or cat breeders, landscape gardeners). Pregnant women should also take extra care with respect to zoonoses.

A zoonosis may involve a virus, bacteria, fungus, or parasite, and may be contracted through the mouth, mucous membranes (nose, eyes), healthy skin, wounds, or inhalation.

Below is a list of zoonoses we want you to be more knowledgeable about. We can provide you with a more extensive list if you require. For more information on these or other zoonoses, please consult your veterinarian.

These two websites may also prove useful:

<http://www.capcvet.org/>(Companion Animal Parasite Council)

<http://www.cdc.gov/>(Centers for Disease Control and Prevention)

At the end of this document there is a list of ways to prevent zoonotic infections.

RABIES: a viral disease affecting all mammals (including humans), that is always fatal to anyone who contracts the disease. The infection is spread via the saliva of an infected animal, usually through a bite or open wound (scratch). Effective vaccines are available to protect humans and animals against this disease, and we are required by law to vaccinate all susceptible pets for Rabies.

ROUNDWORMS: common parasites that live in the intestines of dogs and cats. Puppies and kittens are usually infected with a large number of these worms and shed large numbers of microscopic eggs in their feces. When a human is infected, the parasite does not live in the intestine. Instead, the baby form (larva) migrates to organs in the body or eye ("visceral or ocular larval migrans"). Illness or blindness can result, depending on where the larva resides. Children are particularly at risk for this disease, since they often play outdoors where roundworm eggs may be, and younger children may place unwashed hands in

their mouths. We aggressively deworm puppies and kittens and maintain a deworming routine for adult pets to reduce the risk of human infection.

Raccoon roundworm (*Baylisascaris procyonis*) is extremely prevalent in raccoon droppings and can cause a devastating and often fatal infection in the brain if passed to humans.

Dogs in contact with the droppings can become infected and shed the eggs in their feces, posing a risk to family members. Routine deworming against all roundworms in dogs can be an important way to prevent the spread of raccoon roundworm to people.

HOOKWORMS: common parasites that live in the intestines of dogs and cats, especially puppies and kittens. Infected pets pass eggs in their feces, which hatch into larva on the ground. Humans, especially children may become infected if they walk on the larva with bare feet. The larva travels under the skin, causing a sore ("cutaneous larval migrans"). We routinely deworm pets for these parasites, as well.

TOXOPLASMOSIS: a parasite that can infect many mammals, but whose natural host is the cat. Most people become infected with this parasite by eating undercooked meat but contact with cat feces is another route of infection. The primary concern regarding this infection is the possibility of harm to the fetus if a woman becomes infected while pregnant. Immunocompromised people are also at a greater risk. (Please see our separate information sheet on Toxoplasmosis).

RINGWORM: is not a worm at all, but rather a fungus. The lesions on the skin resemble a worm under the skin, hence the name. The infection is spread via contact with an infected animal's hair or dander. Some pets carry it even though they don't show signs of infection.

BARTONELLA: causes Cat-Scratch Disease. The organism may live on the claws of any cat. After the cat scratches a person, the person may develop signs of the disease: a small red area that develops into a bump, blisters, ruptures, and crusts over. Up to 1/3 of people will also develop fever, muscle aches, fatigue, and headache. Some infections prove to be more serious.

FLEAS: Bites from fleas will cause allergic skin reactions in some people. There is a rare possibility of becoming infected with an intestinal parasite (tapeworm) if a person accidentally eats a flea.

SARCOPTIC MANGE: a skin mite which can cause severe itching and skin lesions in animals. The mite may be transferred to people, resulting in a small, red, itchy area on the skin.

TICKS: are blood-sucking parasites that attach tightly onto the skin. The presence of the tick may cause disease in itself, but ticks are also known to transmit various diseases. (i.e., Lyme Disease, Rocky Mountain Spotted Fever, Ehrlichiosis, and Tularemia).

WAYS TO PREVENT ZOOONOTIC DISEASES:

- Handwashing after handling pets and their feces, especially before eating or preparing food. Wash any wounds from animal bites or scratches immediately. Contact your physician if the vaccination status of the animal is unknown.
- Take your pet to the veterinarian at least once per year and keep up all recommended vaccinations and deworming. Deworm puppies and kittens frequently, beginning at an early age.
- Ask your veterinarian about effective flea and tick control for your pets.
- Depending on the environment, examine yourself and your pet for ticks after being outdoors.
- Take special precautions if you are immunocompromised or pregnant: do not let pets lick your face or an open wound, never touch animal feces, and use extra precautions when handling a pet with diarrhea.
- Don't let your pet drink from toilet bowls or eat feces.
- Remove feces from your pet's environment daily.
- Cover sandboxes when not in use, and wear gloves when gardening if cats are outdoors.
- Eat only well-cooked meat.
- Avoid contact with wild animals and their feces



VETERINARY TERMS

abdominal distension = the belly is enlarged or stretched out

abscess = a localized collection of pus

anaesthesia - general = a state of unconsciousness produced by an anaesthetic that results in absence of pain sensation over the entire body and a degree of muscle relaxation

anaesthesia - local = a medication that produces loss of sensation in a limited area

anemia = the number of red blood cells in the bloodstream is below normal

antibodies = specialized proteins produced by the immune system in response to a substance or a protein or an organism (i.e., bacteria or virus) that the body does not recognize

booster = a vaccination repeated at an appropriate interval after the first vaccination to enhance and sustain the immune response

catheterization = passage of a flexible tube into a passage or cavity

degenerative disc disease = deterioration of the material between the vertebrae (bones of the spine)

degenerative joint disease = (osteoarthritis) deterioration of the joint, leading to pain and arthritis

esophageal = involving the esophagus (the tube leading from the mouth to the stomach)

fecal analysis = a sample of stool is processed in the laboratory and examined under a microscope for evidence of parasites

fractured femur = broken thigh bone

hip dysplasia = abnormal conformation of the hip joint which has a hereditary component and may lead to hind leg lameness, muscle wasting, and arthritis

hormones = chemical messengers to body organs, stimulating certain life processes and slowing down others

hydration status = status of fluid and electrolyte balance in the body

hypoglycemia = lower than normal blood glucose (sugar) level

immunocompromised = weakened immune system

inhalant anaesthetic = anaesthetic taken in through the respiratory system (breathing)

intravenous (IV) catheter = a flexible tube inserted into a vein

larva (plural:larvae) = an immature stage of a animal or insect that must undergo changes in form and size to reach the adult stage

lumbar vertebrae = bones of the spine behind the ribs and in front of the pelvis

mammary = involving the breast tissue

metabolic rate = rate of energy metabolism in the body

metabolism = physical and chemical processes required for bodily energy production and maintenance

mucous membrane = a thin layer of tissue lining certain parts of the body (i.e., gums)

neurological = involving the nervous system (brain, spinal cord, nerves)

orthopedic = involving the bones and joints

osteoarthritis = degenerative joint disease

ovariohysterectomy = surgical removal of the ovaries and uterus (spay)

palpable = able to be felt by the examiner

pulmonary arteries = the blood vessels that carry blood from the heart to the lungs

subcutaneous fluids = fluids containing water, electrolytes and non-electrolytes injected under the skin

topical = applied to the skin

trachea = (windpipe) air passage from the larynx (voicebox) to the lungs

urinalysis = tests done on urine to aid in the diagnosis of disease

vaccination = the administration of attenuated (altered so it cannot cause disease) or killed microorganisms (i.e., viruses, bacteria), to produce immunity to a specific disease