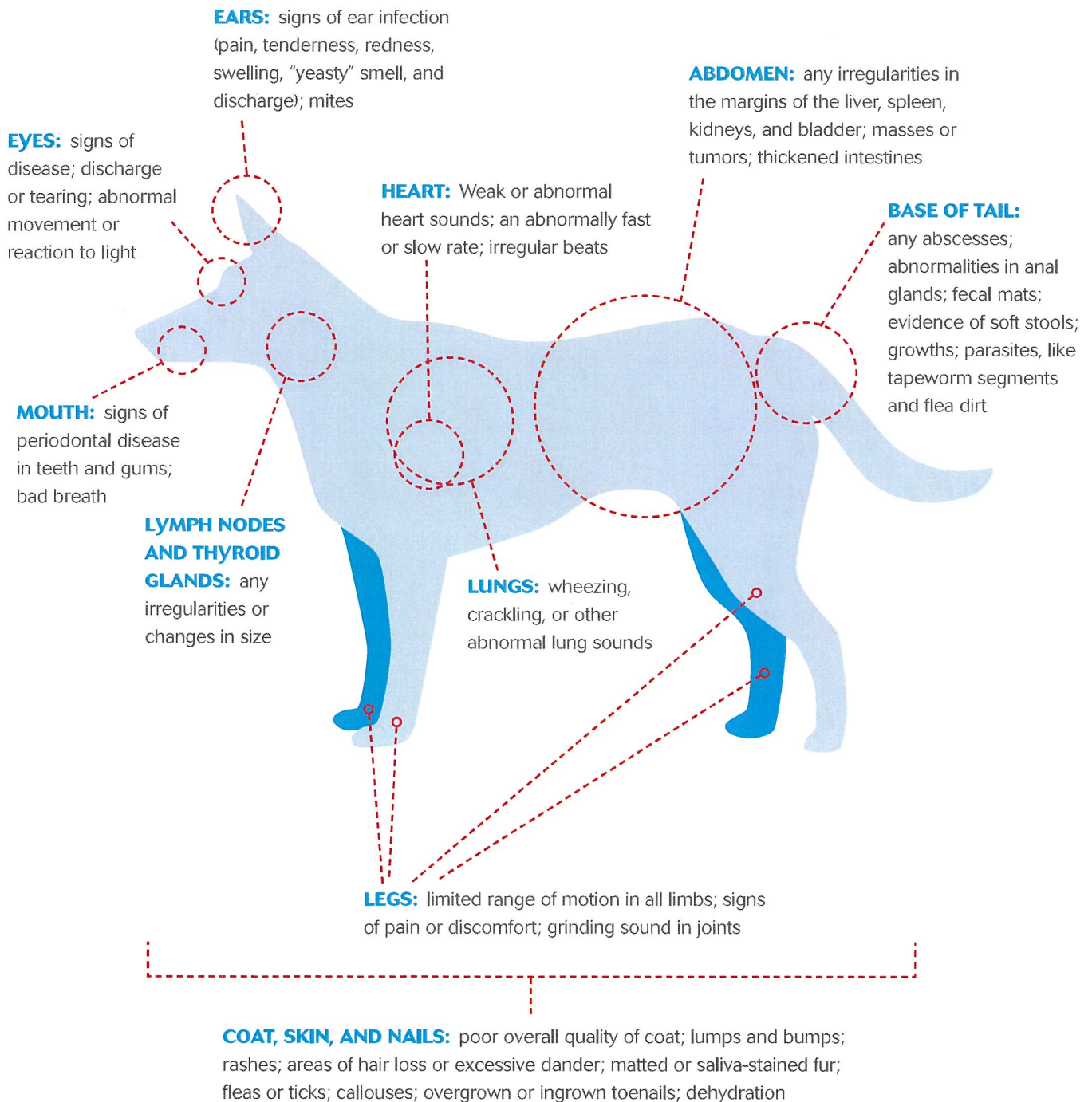


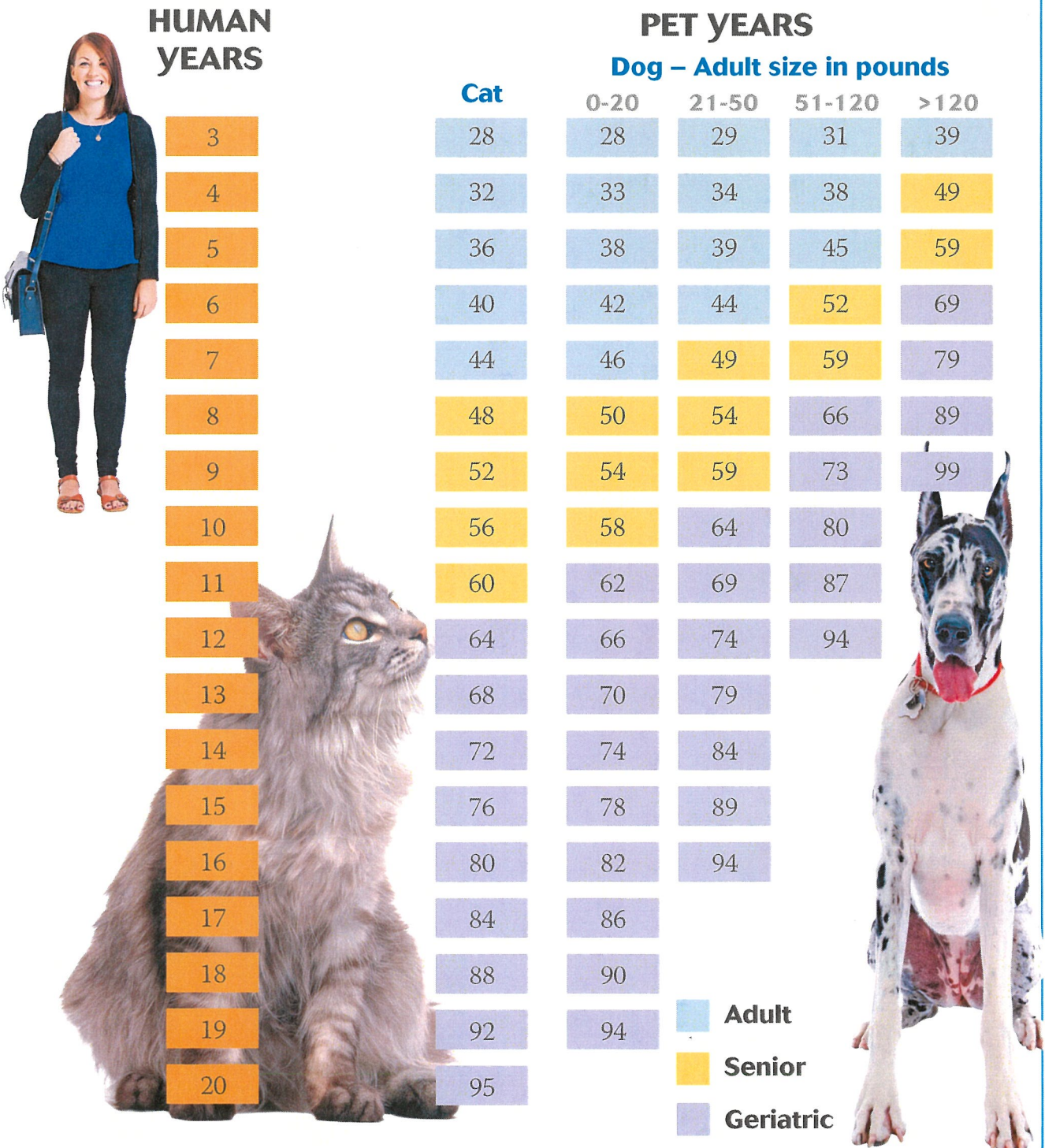
Your dog's physical exam

Just what is the veterinarian looking for when they stare and gently push, pull, and poke your dog during a visit? Here's a breakdown of the major body systems they're checking out and what they're looking for (and hoping not to find).



How old is my pet in human years?

Comparison of cat, dog & human ages



Wellness care for adult pets

Wellness care refers to:

- Wellness exams (once or twice a year)
- Annual blood work
- Examining fecal samples to check for parasites
- Preventive vaccinations

When you consider that pets age roughly seven years for every one year people age, bringing your pet in for an exam twice a year would be equivalent to you seeing your doctor once every 3 1/2 years.

About our exams

What we are screening for, in addition to general good health, is the early detection and treatment of diseases and disorders such as hypothyroidism (too little production of thyroid hormone) or hyperthyroidism (excess production of thyroid hormone), early kidney or liver disease, presence of dental disease, etc.

The earlier we catch these or other problems, the better the chances are that your pet will live a longer, healthier life.

Dental care

The importance of routine dental care cannot be stressed enough. Proper dental care actually helps prevent many health problems as your pet ages. Our wellness exams always include a thorough examination of the mouth.

Preventive care

When early tartar buildup is diagnosed, we can offer some preventive care. This might include one or more of the following:

- A dental diet designed to prevent tartar buildup
- A liquid that can be added to drinking water and has an enzymatic action to slow down tartar buildup
- Toothbrush and toothpaste kits
- Other products that help keep the teeth clean

Dental cleanings

Once tartar has noticeably accumulated on the surface of the teeth, the next step is a professional dental cleaning. Even the most obedient pets won't lie back and keep their mouths open, so this procedure needs to be done under general anesthesia. This means your pet will get to spend the day with us and go home late that afternoon with sweet-smelling breath and clean, healthy teeth and gums.

Delaying or abstaining from dental cleanings can have drastic implications on your pet's overall health. As tartar builds up, abscesses may form along the gum line causing infection. Left unattended, the infection can enter the blood stream, leading to health problems and potentially prove fatal.

Weight control & joint care

Weight control

Maintaining your pet at a healthy weight helps prevent or minimize a variety of health risks including arthritis, joint problems, diabetes, heart disease, and breathing problems.

Healthy weight is achieved and maintained through a balanced diet and exercise. If your pet is overweight, our veterinarians can create a weight-loss plan specific to your pet's individual needs. In addition to reducing food and increasing exercise, we have other options such as prescription diet foods and weight-loss medication.

Joint care

Older pets frequently suffer from arthritis and joint pain. Proper joint care can increase your pet's quality of life. In addition to maintaining a healthy weight, we offer several supplements for joint health. We also have prescription diet foods to help keep joints healthy.

Please consult your veterinarian about optimal weight, exercise, nutrition, and possible medications for your pet's needs.

Understanding your pet's blood work

Blood tests help us determine your pet's health status and causes of illness accurately, safely, and quickly and let us monitor the progress of medical treatments. A checkmark in any box indicates a significant abnormal finding on your pet's blood work. If you have questions, ask any staff member. We want you to understand our recommendations and be a partner in your pet's care.

Complete blood count (CBC)

The most common test, a CBC gives information on hydration status, anemia, infection, the blood's clotting ability, and the immune system's ability to respond.

- > HCT (hematocrit) measures the percentage of red blood cells to detect anemia and dehydration.
- > Hb and MCHC (hemoglobin and mean corpuscular hemoglobin concentration) measure hemoglobin, the oxygen-carrying pigment of red blood cells (corpuscles).
- > GRANS and L/M (granulocytes and lymphocytes/monocytes) are specific types of white blood cells
- > WBC (white blood cell) count classifies and measures the body's immune cells. Increases or decreases indicate certain diseases or infections.
- > EOS (eosinophils) are a specific type of white blood cells that, if elevated, may indicate allergic or parasitic conditions.
- > PLT (platelet count) measures cells that help stop bleeding by forming blood clots.
- > RETICS (reticulocytes) are immature red blood cells. High or low levels help classify anemias.

Serum chemistry profile

These common tests evaluate organ function, electrolyte status, hormone levels, and more.

- > ALB (albumin) is a serum protein that helps evaluate hydration, hemorrhage, and intestinal, liver, and kidney health.
- > ALKP or ALP (alkaline phosphatase) elevations may indicate liver damage, Cushing's disease, and active bone growth in young pets.
- > ALT (alanine aminotransferase) is a sensitive indicator of active liver damage but doesn't indicate the cause.
- > AMYL (amylase) elevations show pancreatitis or kidney disease.
- > AST (aspartate aminotransferase) increases may indicate liver, heart, or skeletal muscle damage.
- > BUN (blood urea nitrogen) reflects kidney function. An increased blood level is called azotemia and can be caused by kidney, liver, and heart disease, urethral obstruction, shock, and dehydration.
- > Ca (calcium) deviations can indicate a variety of diseases. Tumors, hyperparathyroidism, kidney disease, and low albumin are just a few of the conditions that alter serum calcium.
- > CHOL (cholesterol) is used to supplement diagnosis of hypothyroidism, liver disease, Cushing's disease, and diabetes mellitus.
- > Cl (chloride) is an electrolyte often lost with vomiting and Addison's disease. Elevations often indicate dehydration.
- > Cortisol is a hormone that is measured in tests for Cushing's disease (the low-dose dexamethasone suppression test) and Addison's disease (ACTH stimulation test).
- > CREA (creatinine) reflects kidney function. This test helps distinguish between kidney and nonkidney causes of elevated BUN.
- > GGT (gamma-glutamyl transpeptidase) is an enzyme that, when elevated, indicates liver disease or corticosteroid excess.
- > GLOB (globulin) is a blood protein that often increases with chronic inflammation and certain disease states.
- > GLU (glucose) is blood sugar. Elevated levels may indicate diabetes mellitus or stress. Low levels can cause collapse, seizures, or coma.
- > K (potassium) is an electrolyte lost with vomiting, diarrhea, or excessive urination. Increased levels may indicate kidney failure, Addison's disease, dehydration, and urethral obstruction. High levels can lead to cardiac arrest and death.
- > LIP (lipase) is an enzyme that may indicate pancreatitis when elevated.
- > Na (sodium) is an electrolyte lost with vomiting, diarrhea, and kidney or Addison's diseases. This test also helps indicate hydration status.
- > PHOS (phosphorous) elevations are often associated with kidney disease, hyperthyroidism, and bleeding disorders.
- > TBIL (total bilirubin) elevations may indicate liver or hemolytic disease. This test helps identify bile duct problems and certain types of anemia.
- > TP (total protein) indicates hydration status and provides information about the liver, kidneys, and infectious diseases.
- > T4 (thyroxine) is a thyroid hormone. Decreased levels often signal hypothyroidism in dogs, while high levels indicate hyperthyroidism in cats.

Information from your veterinarian

Bad breath (halitosis) in pets

Does your pet's mouth smell not so sweet? A bad odor can be a sign of serious problems for your pet, such as periodontal disease or oral or systemic infection. So discuss your pet's problem with your veterinarian.



Common mouth myths: true or false?

Pets are supposed to have bad breath.

FALSE. An odor is not normal. Just like in people, bad breath in pets is often a sign of dental disease and requires treatment to safeguard your pet's health.

Pets don't need regular oral hygiene.

FALSE. Even with regular dental cleanings at your veterinary practice, your pet still needs regular tooth brushing to keep his breath sweet and his pearly whites sparkling.

Pets' mouths clean themselves.

FALSE. While there are some natural enzyme systems at work in your pet's mouth, it will not keep your pet's mouth clean. Debris builds up on your pet's teeth and requires brushing or rubbing to keep the mouth fresh.

Cats don't need dental care.

FALSE. Cats and small-breed dogs often require more dental care than larger-breed dogs.

Cats have stinky breath because they eat smelly foods.

FALSE. An odor in your cat's mouth is a sign of a health problem, and you should discuss your pet's problem with your veterinarian.

Prevention: The best medicine

You can prevent bad breath and dental disease with regular oral care. Your veterinarian recommends daily tooth

brushing. This is the best way to keep your pet's mouth healthy. You may also use daily oral hygiene rinses, dental diets, water additives, and safe chew toys to keep your pet's mouth clean.

Remember, the more home care that you offer to prevent dental disease, the less care your veterinarian will need to provide to treat problems in the future.

Signs your pet is suffering from dental disease

- Bad breath
- Red gums (healthy gums are a pink, shrimp-like color)
- Pus oozing from gums
- Facial swelling
- Yellow or brownish buildup on the teeth
- Pain

Another clue that your pet may be in pain is if it goes to the food bowl and backs away as if scared or drops food from its mouth.

Treatment: What your veterinarian will do

Your veterinarian will conduct a thorough head-to-toe exam as well as a comprehensive oral exam. If the doctor identifies signs of dental disease, he or she may recommend preanesthetic testing. This may include blood work and an electrocardiogram to see whether your pet is a candidate for anesthesia. It is necessary for your pet to be anesthetized for your veterinarian to fully diagnose the source of the problem and take steps to correct it.

Remember, untreated dental problems in pets have been linked to serious medical problems, including heart, liver, and kidney disease. So if you notice bad breath or other signs of dental disease, schedule an appointment with your veterinarian.

Form courtesy of Dr. Scott Linick, FAVD, Plainfield Animal Hospital, South Plainfield, N.J.

5 signs of *dental pain* in pets

Your pets can't tell you when they're suffering from a toothache or other types of pain. If you notice any of these signs, contact your veterinarian to schedule an exam.

1. No signs at all.

Dogs, cats and other companion animals, such as rabbits, rarely show signs of dental pain. This is a survival mechanism, an instinctual behavior that our domesticated animals have in common with their wild ancestors.

2. Bad breath.

The odor is a byproduct of the bacterial metabolic process. In pets with periodontal disease, there is more bacteria in the mouth, and so the odor increases. "Doggy breath" or "tuna breath" is not normal and needs to be evaluated.

3. Altered behavior.

Chewing on one side of the mouth, dropping food, running away from the food dish, crying when yawning, hiding, not grooming themselves and acting "grumpy" are all signs of dental pain. You know your pet better than anyone, so look for abnormal behaviors.

4. Bleeding.


Bleeding from the mouth is usually due to periodontal disease, but it could also be evidence of fractured teeth, lacerations or ulcers on the tongue or gum tissue or the presence of an oral mass. Look for thick, ropey saliva, spots of blood found on toys or beds or drops of blood in the water or food dish. If the periodontal disease is severe enough, you may notice bleeding from the nose or bloody discharge when your pet sneezes.

5. Return to normal.

Once our veterinary team addresses your pet's oral issues, your pooch may show he's feeling better by acting like a puppy again or your kitty might seek extra attention.



Don't let your pets suffer in silence. They don't just have a toothache, they have a whole mouth full of toothaches. Daily dental hygiene is free. All you need is a toothbrush and a couple of minutes to help prevent periodontal disease.



Pet obesity: *Get a handle on* health risks

Too many calories and not enough exercise can pack a few pounds on pets—and tipping the scales puts our furry friends at a greater risk of developing health problems. Luckily, many obesity-related diseases can be delayed or prevented by keeping pets in a healthy weight range.

Pets are considered overweight when their weight is 15 percent or more above ideal and obese when their weight is 30 percent or more above ideal. Your veterinarian can assess your pet's body condition and gauge if weight loss is necessary—and work with you to develop a strategy if your pet needs to drop a few pounds.

Here are a few reasons to keep your four-legged family members lean and trim:

- > Excess weight places stress on the joints and can lead to **joint pain**, **arthritis** and **ligament injuries**.
- > Overweight and obese dogs are often at risk of developing **insulin resistance** and **diabetes**. Diabetes has also been associated with obesity in cats.
- > Obesity and a high-fat diet can trigger **pancreatitis**, an inflammatory condition of the pancreas.
- > **High blood pressure** is often seen in animals that are obese or overweight and can lead to other secondary complications, such as kidney and eye diseases.
- > **Respiratory distress** and **exercise intolerance** is commonly seen in pets carrying extra pounds.
- > Overweight and obese dogs and cats typically have **shorter lifespans** than their leaner counterparts.

How can I tell if my pet is **overweight?**

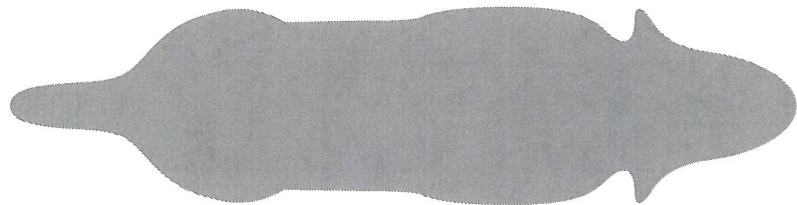
Try these simple at-home tests to see if your beloved pet should see the veterinarian for weight control.

If you're unsure what your pet's optimum weight should be, perform this simple test at home: Place your hands on your pet's rib cage with your thumb on the back.

> If you feel your pet's ribs easily, your pet is probably at a normal weight.

> If you can feel some fat between the skin and ribs or if the ribs are difficult to detect, your pet is probably considered overweight.

> If you can't feel the ribs at all, your pet may likely be obese. In some pets, particularly cats, a large abdomen that hangs down toward the ground may indicate obesity. It's important to have this judgement confirmed by your veterinarian; he or she can rule out other diseases that can sometimes look like obesity but instead are heart, kidney or glandular disease.



Your pet is a probably a healthy weight if ...

- You can easily feel its ribs
- It has a tucked abdomen and no sagging stomach
- You can see its waist from above



Your pet might be overweight if ...

- You have difficulty feeling its ribs
- It has a sagging stomach, and you can grab a handful of fat
- It has a broad, flat back and no visible waist

Your pet *needs your help*

Show your favorite pet how much you love her by teaming up with your veterinarian to get her to a healthier weight.

How do I know Fluffy's a little too, er, "fluffy?"

- You have difficulty feeling your cat or dog's ribs
- Your pet has a sagging stomach, and you can grab a handful of fat

- Your pet has a broad, flat back and no visible waist

Confirm your suspicions with your veterinarian. You might feel guilty—even defensive—but the bottom line is that you're a great pet parent for asking the question.

What if the fat looks fine to me?

The problem is, a couple pounds to a dog or cat is a lot. For example, the ideal body weight for most cats is 8 to 10 pounds. If that cat was a 5'4" adult female, she'd weigh a healthy 108 to 145 pounds. However, if a cat weighs 14 pounds, its 5'4" human equivalent would now be more than 200 pounds. And just like with humans, extra weight causes disease like arthritis, diabetes, pancreatitis and high blood pressure.

How do I help my pet get healthier?

What can you do to help your pet shed the extra weight and decrease its risk for serious conditions? Your veterinary team can help—ask them!

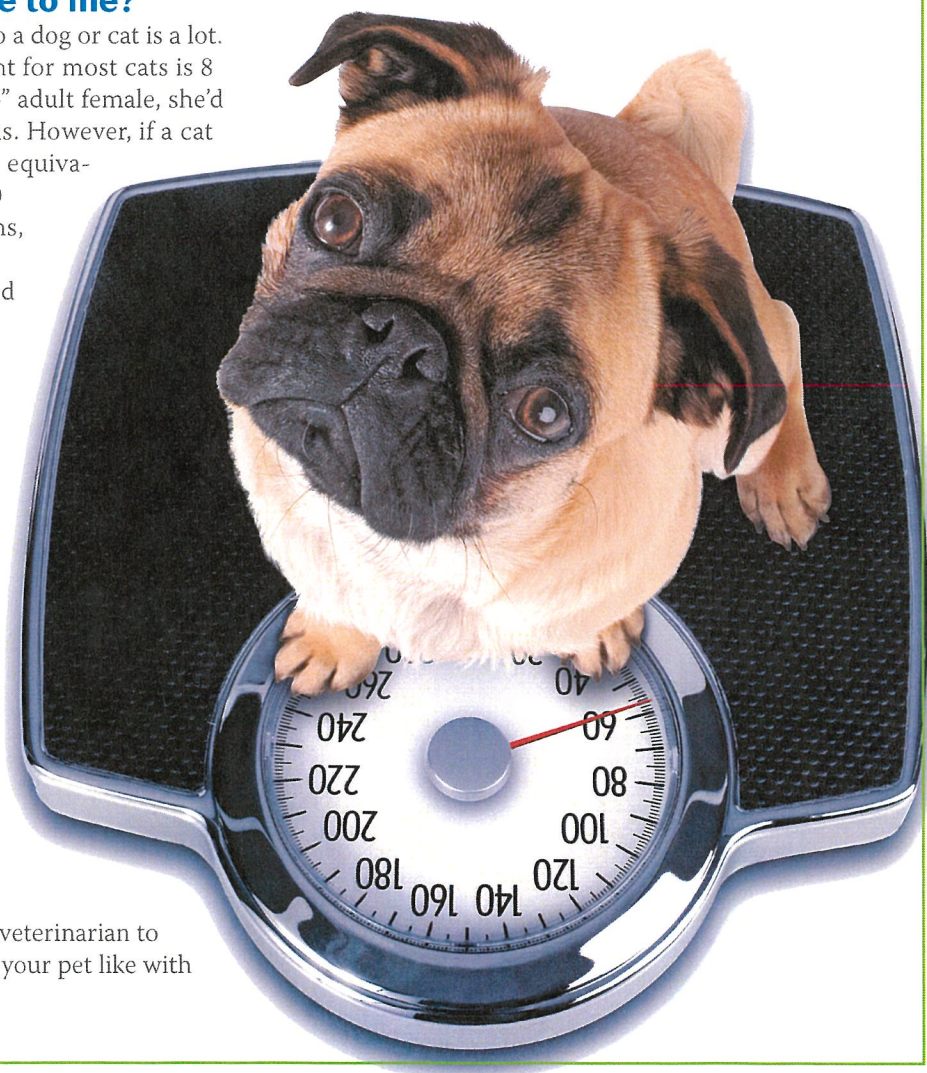
Don't worry. A weight management plan doesn't have to be complicated—or costly—and there are ways to make slimming down seem like the best thing ever to your pet. Here are four ways to keep your pet happy with healthier eats and play:

Don't cut out treats. Ask your veterinarian to recommend a healthy way to treat your pet like with

extra attention (that's what they really want, right?) or a veterinarian-approved single-ingredient snack. Believe it or not, most dogs love baby carrots, broccoli, celery, and cucumbers—even asparagus.

Make eating fun—and burn calories. Use food puzzles and other toys, or hide small bowls of food around the house.

Go play. Take walks and play fetch with your pet—get out there and get moving!



Identifying pain:

The enigmatic ways pets show—and hide—pain

Rehabilitation and pain management specialist Dr. Janice Huntingford says pets will clue us in on how they feel *if* we know what to look for.

Unfortunately, our pets can't just tell us when they hurt. Of course, there's no doubt when it's dinner time, right?

But the truth is, dogs won't always express pain by whining, and cats—they're masters at hiding pain. If you don't pay attention to the little clues that indicate your pet is hurting, you may miss when your pet needs your help.



The obscure cat

Cats are good at hiding their pain. So, if you notice your cat acting grouchy, flattening his ears back, really crouching up his body position, or—especially—hiding, it may be a good indication that your pet is experiencing pain.

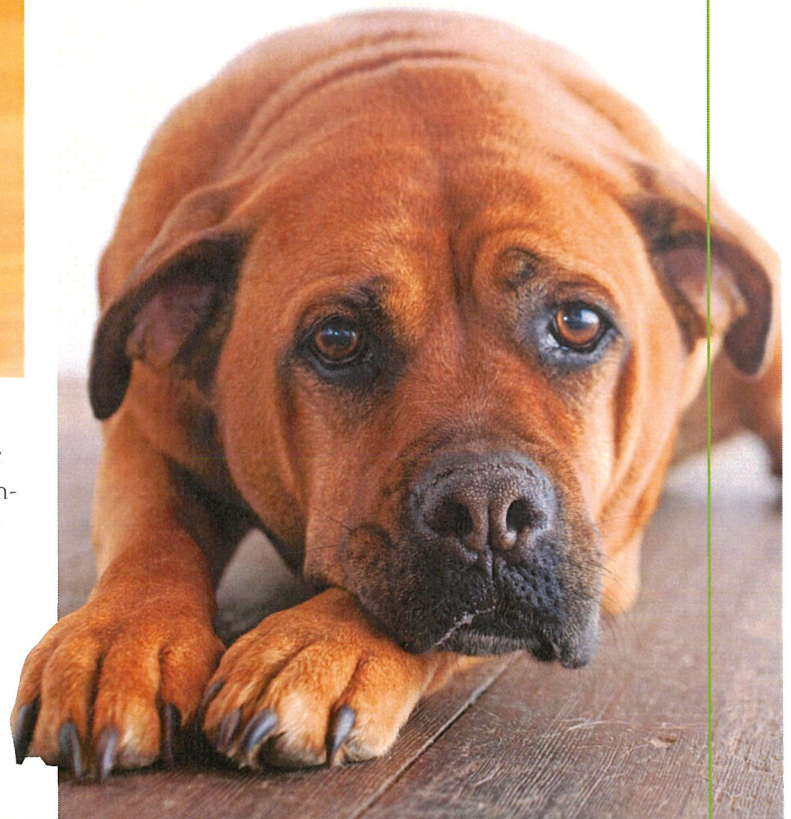
Here are some other indicators:

- Not being able to jump up on a bed or counter
- Any issues with the litter box
- Not grooming or not wanting to be groomed
- A decrease in appetite
- Aggressive behavior when touched

The sad dog

Don't think that a dog whining or crying is the only indicator that a dog might be in pain. In fact, dogs will rarely whine or cry unless they are in severe pain. So, look for these other signs to recognize when your dog may be experiencing pain:

- A decrease in appetite
- Trembling
- Has a sad or tense "look" on his face like he is in pain
- Not using a leg
- Avoiding stairs
- Not greeting you as usual
- Crouching
- Taking a long time to urinate or defecate
- Excessively panting





Lack of MOBILITY

may mean *less time with your pet*

Here are five ways to improve your senior pet's health—and maybe even his life expectancy—by helping him get back to the things he used to do.

LET'S GET PHYSICAL

Take your pet to the veterinarian for a physical exam and find out if he has any medial conditions that might affect a workout routine, such as arthritis, a heart condition or respiratory issues.

Lose the weight. If your pet is overweight, work with your veterinarian to form a diet plan that is palatable, keeps your pet satiated and still allows for occasional treats. Weight loss reduces excess strain on joints and weakened muscles, which may reduce pain.

FIRST STEPS

Slow and steady wins this race. Start your senior pet with five minutes of walking, adding an additional five minutes each day for five days until a daily 30-minute walk is manageable and routine.

Relieve any pain. If your pet is limping, lagging, panting excessively or refuses to continue, stop the activity and check with your veterinarian. Some pets may require pain medication to get moving or to complete an exercise.

STEP IT UP

Once you and your pet have achieved a daily exercise routine, you can increase duration, speed, even incorporate hills or different surfaces like sand to add more challenge. Walks will become easier as your pet becomes stronger.

Strengthen hind limbs. If your pet can't jump onto the couch or climb the stairs well these days, it's likely because, like many older dogs, he has lost strength in his hind legs. Focus on building back those muscles with exercises recommended by your veterinarian.

EXERCISE THE MIND

Senior pets need to exercise their minds as well as their bodies. Obstacle courses can be a fun way to stimulate your pet's mind and improve neurologic and muscle control.

Get creative. If you use simple household objects, you can stimulate your pet's mind with physical games. For example, coax your pet to step over a garden hose fashioned in a serpent pattern in the backyard—broom handles or pool noodles also work well. For pets already at a good fitness level, try rally events, agility classes, tracking or field events.

DON'T GIVE UP

Discomfort and a lack of strength and flexibility may make achieving mobility seem like an insurmountable task. But don't give up! Exercise can be tailored to fit the needs of any pet and will not only improve your pet's health, but strengthen the bond you share with your pet as well.

Rehab for results. If physical injuries prevent your pet from exercising, ask your veterinarian about rehabilitation. Rehab specialists can use methods such as joint mobilization, massage, stretching, laser therapy and acupuncture to help get your pet up and moving again.

Exercises for the four-legged work out

Maintaining an active lifestyle through daily physical exercise may be the No. 1 thing you can do to promote muscle strength, joint flexibility and overall health in senior pets. Try these exercises to keep your pets moving.

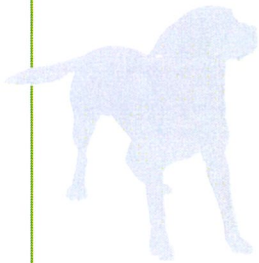


> Step-ups.

Encourage your pet to put both front feet up on one step. Doing so will shift his weight to the hind legs. Hold this position for up to 60 seconds. As your pet becomes stronger and more comfortable with this exercise—and if his size allows it—see if he can reach the next step up to increase the level of difficulty.

> Three-legged stands.

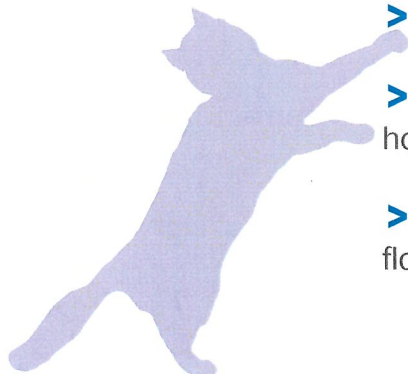
With your pet in a standing position, gently pick up one limb and hold it for 10 seconds, eventually working up to 20 seconds. This forces your pet to shift his weight onto the remaining three limbs, improving strength and balance. Do this with each limb, working your way around to all four limbs.



> Sit to stands.

Ask your dog to sit, and then have him stand up, and repeat. Build up to 10 to 15 repetitions twice a day, and reward your pet every few reps to help keep him engaged.

If your pet is a cat, exercises may need to look a little different. Try these exercises for cats:



> **Play time.** Use cat toys to get them moving.

> **Hide and seek.** Hide food in small bowls around the house and push them by placing food on elevated platforms.

> **Dine and dash.** Toss food kibble by kibble across the floor to encourage your cat to get up and walk for his meal.

Having FUN when it's TOO COLD outside

In nice weather, you and your pet may enjoy walks, runs or other exercise outside. Here are tips to keep your pet exercising and at a healthy weight when winter is here.

Keep those legs running

Winter is a time to keep to your shared exercise regimen, but be smart. After dark, you can't go throwing a frisbee in the park or taking a swim in the lake. And it could be too cold. Some cities have indoor gyms with dog-friendly spots for a warm run-around. Or you can turn your own house into a mini-gym with a game of fetch up and down the hall—or up and down the stairs— or a mini-obstacle course in the basement. For cats, dig up those feather toys and post-holiday cardboard boxes and go crazy.

DYK? Looks like hibernation

Our activity levels are dramatically affected by shortened daylight hours. If you get home and it's dark, you and your dog may be less inclined to want to go out for that walk. "I should be in a cave resting and staying warm!"

Cut calories

It's OK in winter to get a little less exercise, but to maintain a healthy weight, you need to watch your dinner plate—and your pet's food bowl. Check with your veterinarian about calculating the right amount of food for winter. And watch the holiday treats you give your cat or dog—stick to crunchy vegetables, meat and fish, instead of sugar-filled or high-carb snacks.



Big changes

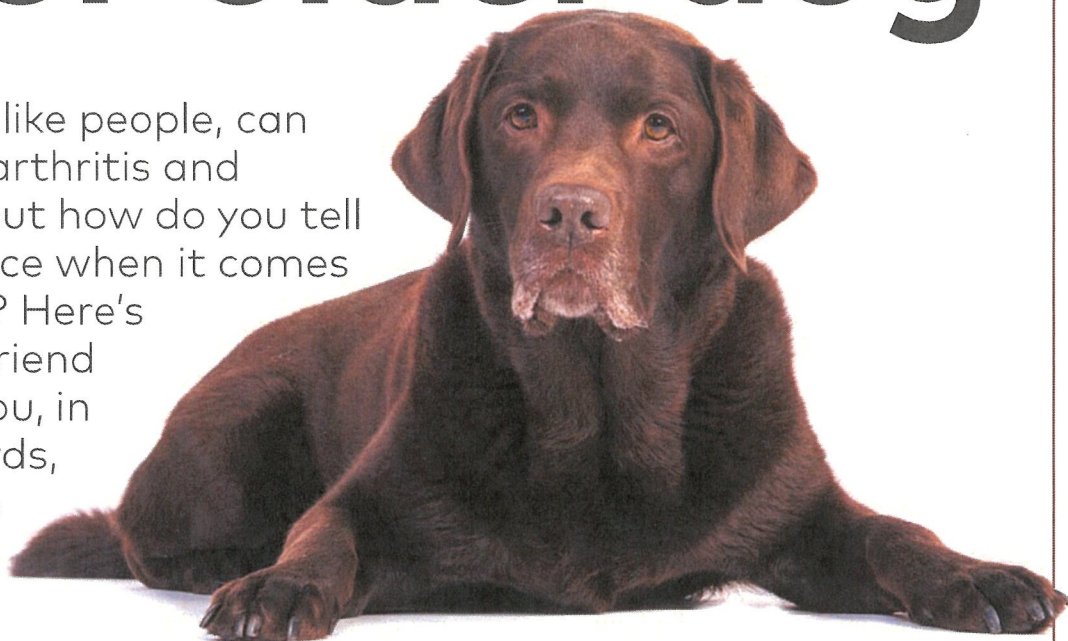
Real physiological changes happen in a cat's or dog's body in the winter. Metabolism slows down to store energy more effectively and efficiently than in spring or summer. Winter is the time our bodies store more energy as fat.

Pause for paws

If it's particularly cold, your dog needs protective clothing (just like you): dog coats as well as booties to protect paws. Yes, your cat or dog has fur, but they've adjusted to the same environment you have—warm temperatures indoors thanks to heating and air-conditioning. They're not ready for below-freezing temperatures naked any more than you are.

Hey there. It's me ... your older dog

Older dogs, like people, can experience arthritis and dementia, but how do you tell the difference when it comes to your dog? Here's what your friend might tell you, in his own words, about when he needs your help ...



Hello, human! Sure, I may not be as young as I once was, but when you walk into the room, you just light up my world. So even if I don't jump up and greet you the way I used to, I hope you can tell by my thumping tail how much I love you.

Sorry I haven't been paying as much attention to you as you deserve. Some things aren't quite right with me. I'm not sure what they are, but I know you can help me...

When it could be arthritis

I'm sore. Everywhere hurts. It started with this dang elbow—or maybe it was my hip or the trick knee. I lick and chew at it to heal it, but it's just not working. When I walk, I try to keep my weight off of it, and it's harder for me to get up in the morning and go up and down stairs. I'm really stiff after sleeping and when it's cold outside.

It's really hard to get comfortable, and sometimes that makes me restless, and I bark at night. I'm sorry. I used to lie on my stomach, but now that hurts, so I lie on my side.

I still love walks and fetching balls and chasing squirrels, but it hurts so much that I have a harder time keeping up. Sometimes it hurts so much I give up altogether or I get really grouchy. I'm sorry. Can you help me?

When it could be dementia

I'm really confused. I'm awake when I should be asleep, and I'm sleeping a lot more during the day than I used to. I'm sorry—I know that's probably exhausting for you.

I can't find my keys (oh wait, that's you), I mean I can't recognize my favorite treats anymore, and when I drop food, I can't find it. I end up standing in the corner of a room or the yard or staring at a wall because I can't remember where I am.

Yesterday, I got stuck behind the couch, and when you let me in from going potty, I got really confused and bonked right into the other side of the door that doesn't open.

I'm really embarrassed because the other day I had an accident in the house. I just didn't know where I was—I'm sorry. I used to love barking at the letter carrier, but I've lost interest.

I've also noticed that I can't stop bobbing my head, I'm pacing a lot, and my leg won't stop shaking.

Can you help me?

Pet owner: Yes, you can help. With the right medicine or treatment, your veterinarian can help your dog live a longer, healthier life. Come visit us to talk!

THE USUAL SUSPECTS:

Top 10 terrible toxins for cats and dogs

The veterinarians at Pet Poison Helpline have compiled a list of the top 10 most common poisoning cases in dogs and cats. Let's learn about these crimes of poisoning.

In case of... If your cat or dog shows signs of poisoning in this handout or you suspect that your pet has eaten any of these substances, you should **call or visit a veterinarian immediately.**

Chocolate

Chocolate tops the list—and for good reason! Chocolate is prevalent in our homes, especially during holiday celebrations. Unfortunately, dogs are eager to chow down on it when the opportunity arises. Darker chocolate contains more theobromine, the toxic component, than milk chocolate and is therefore considered more dangerous to dogs. The amount of chocolate ingested in relation to the size of the dog is also key in assessing risk. Smaller ingestions can cause symptoms of vomiting, diarrhea, increased thirst and hyperactivity. Larger ingestions carry risk of elevated heart rate, tremors and seizures.

Mouse and rat poisons

Rodenticide baits placed in the home, garage and other buildings are a common source of accidental poisoning for pets. There are three main types of baits on the market: anticoagulants, bromethalin and cholecalciferol.

Anticoagulant baits interfere with the body's ability to clot the blood and can lead to signs of bleeding, decreased activity, decreased appetite, pale gums and difficulty breathing. Fortunately, these types of baits have an effective antidote.

Bromethalin rodent baits cause

swelling of the brain when ingested by pets and can lead to symptoms including lack of coordination, decreased activity, weak or wobbly gait, tremors and seizures. This type of bait has no antidote, so prompt veterinary treatment is imperative.

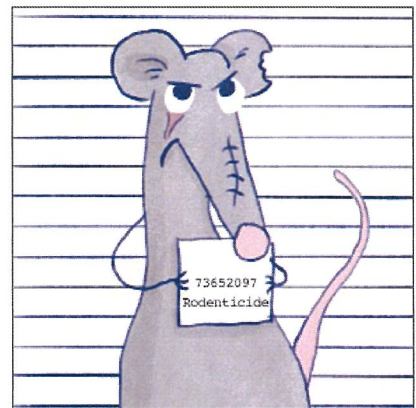
Cholecalciferol is a type of vitamin D used in rodent bait and is covered in vitamin D below.

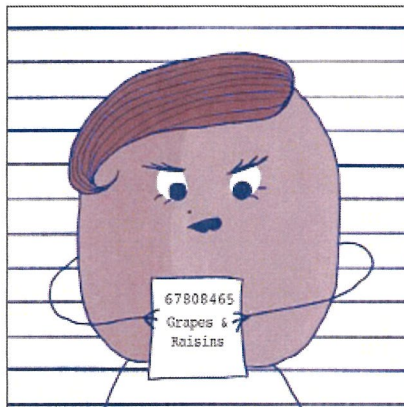
Ibuprofen (Advil, Motrin)

Ibuprofen is a popular nonsteroidal anti-inflammatory medication present in most homes. Ibuprofen is safely used to treat pain in people, but even one or two pills can be dangerous for pets. Cats are especially sensitive to this drug as their bodies are unable to metabolize it well. When ingested by dogs and cats, ibuprofen can cause vomiting, stomach ulcers with subsequent bleeding into the gastrointestinal tract, damage to the kidneys and, in very high doses, possibly neurologic effects like sedation and seizures.

Xylitol

Xylitol is a type of sweetener toxic to dogs that's used in sugar-free gums and dental products, and as a sugar substitute. Dogs that ingest xylitol can develop low blood sugar and injury to the liver if enough is consumed. Symptoms





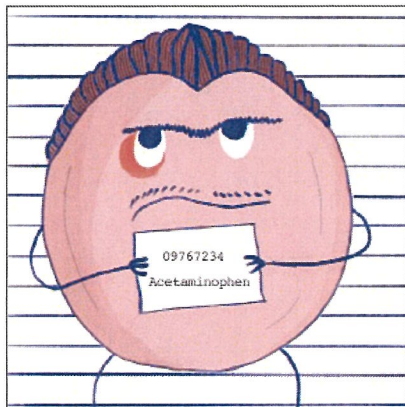
of xylitol poisoning include vomiting, weakness, uncoordinated movements and seizures. Liver damage can occur later and can lead to symptoms of decreased appetite, continued vomiting and jaundice.

Grapes and raisins

Raisin and grape poisoning in dogs is poorly understood but can result in kidney failure. Dogs that eat toxic amounts of grapes and raisins will usually start to vomit within 24 hours of ingestion progressing to kidney damage over the next couple of days. Affected dogs can show symptoms of decreased activity and appetite, continued vomiting and changes in thirst and urination. Fortunately, dogs have a good prognosis when treated early before kidney damage occurs.

Antidepressants (Prozac, Paxil, Effexor, Cymbalta)

Antidepressants are increasingly prescribed for behavior and anxiety issues in pets, but overdoses can lead to such serious symptoms as hyperexcitability or lethargy, disorientation, vomiting, dilated pupils, tremors, seizures and changes in heart rate and blood pressure. Depending on the specific drug and the size of the pet, even one or two pills can lead to poisoning.



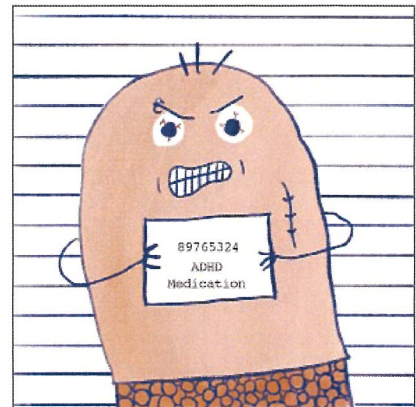
Acetaminophen (Tylenol)

Acetaminophen is a pain medication used frequently by humans, but unfortunately, this common medication can cause serious poisoning when ingested by pets. Cats are especially sensitive to acetaminophen, and ingestion of just one pill is almost always enough to cause illness.

Dogs that ingest overdoses of acetaminophen tend to develop damage to the liver, which may manifest with symptoms such as vomiting, decreased appetite and jaundice. Cats show rapid onset of symptoms, which may include decreased appetite and activity, drooling, vomiting, swelling of the face and paws, and difficulty breathing.

Vitamin D and cholecalciferol

Human vitamin D supplements and cholecalciferol rodenticides can lead to serious poisoning when ingested in excess by pets. Overdose of vitamin D causes the blood calcium levels to rise, and if left untreated, can result in damage to organs, most commonly kidney failure. Pets that ingest overdoses of vitamin D will commonly show early vomiting, lack of appetite and later increased thirst and urination.



Stimulant drugs (Adderall, Ritalin, Vyvanse)

Stimulant medications prescribed for attention-deficit/hyperactivity disorder (ADHD) can cause serious symptoms when ingested by pets, even with ingestion of just one or two pills. Ingestion of these medications can result in hyperactivity, dilated pupils, tremors and seizures as well as elevated heart rate, blood pressure and temperature. Some of these medications are formulated to have an extended duration of effect and can lead to prolonged symptoms of poisoning in pets.

Fertilizers

Fortunately, most ready-to-use yard and garden fertilizers are low risk when ingested by pets, especially when properly applied. Many fertilizers contain ingredients that are tasty to dogs, such as bone, blood and fish meals, and they will readily eat fertilizer if given the chance.

Vomiting and diarrhea are the most common effects. Sewage-sludge-based fertilizers, such as Milorganite, carry an increased risk of stomach upset symptoms and can also cause self-limiting muscle pain and stiffness.

Other internal parasites

Coccidia

Coccidia (cok-SID-ee-ah) are single-celled parasites and are not visible to the naked eye. Your pet can become infected by eating infected soil or licking contaminated paws or fur. Once swallowed, the parasites damage the lining of the intestine and your pet cannot absorb nutrients from its food. Bloody, watery diarrhea may result, and the animal may become dehydrated because it loses more water in its stool than it can replace by drinking. Young pets are most often infected because their immune systems may not yet be strong enough to fight off the parasite. *Coccidia* can be very contagious among young puppies and kittens, so households with multiple pets should be especially careful to practice good hygiene and sanitation.

A routine fecal test by a veterinarian will detect the presence of *coccidia*. Treatment with medications will prevent the parasite from multiplying and allow time for your pet's immune system to kill the parasites.

Giardia

Giardia (gee-AR-dee-ah) is also a single-celled parasite that, if swallowed, can damage the lining of the intestine and reduce the absorption of nutrients from the food your pet eats. While most *Giardia* infections do not cause illness, severe infections can lead to diarrhea.

Giardia is harder to diagnose than other intestinal parasites, and several stool samples may have to be tested before it is found. If necessary, your veterinarian will recommend treatment with medications to eliminate the infection.

Because it is highly contagious among animals, good hygiene and sanitation are important when there are multiple pets in the household.

Important points about internal parasites

- See your veterinarian if your pet has diarrhea, weight loss, increased scooting, a dull coat, or if you see worms under its tail, in its bedding, or on its stool.
- Prompt treatment of internal parasites lessens your pet's discomfort, decreases the chances of intestinal damage, and decreases the chance that your pet will infect humans or other animals.
- Good hygiene and sanitation reduce the chances that your pet will infect people or animals. You can help prevent the spread of infection by always cleaning up your pet's droppings immediately.

For more information, visit,
American Veterinary Medical Association
www.avma.org

Companion Animal Parasite Council
www.capvet.org



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Internal Parasites in Cats and Dogs



Brought to you by your veterinarian and the
American Veterinary Medical Association

Most internal parasites are worms and single-celled organisms that can exist in the intestines of dogs or cats. The most common worms are roundworms, hookworms, whipworms and tapeworms. Common single-cell parasites are coccidia and Giardia.

What are roundworms and how are they spread?

Roundworms are the most common intestinal parasite in dogs and cats in the world. Animals with roundworms pass the infection to other animals when the worm eggs develop into larvae and are present in the animal's feces (droppings). Your pet can pick up the infection by eating infected soil, licking contaminated fur or paws, or by drinking contaminated water.

Infected female dogs may pass the infection to their puppies before birth or afterwards when they are nursing. Infected female cats cannot infect their kittens before birth, but can pass on the infection through their milk when kittens are nursing.

What are the health risks to pets and people?

Puppies and kittens are the most prone to roundworm infection. Because roundworms live in the small intestine, they steal the nutrients from the food pets eat, which can lead to malnutrition and intestinal problems. As the larvae move through a pet's body, young animals may develop serious respiratory problems such as pneumonia.

Roundworm infections are zoonotic (pronounced zoe-oh-NOT-ick) diseases, meaning that they are animal diseases that can be transmitted to humans. While direct contact with infected dogs and cats increases a person's risk for roundworm infection, most infections come from accidentally eating the worm larvae or from larvae that enter through the skin. For example, children are at risk for infection if they play in areas that may contain infected feces, (such as dirt piles and sandboxes), where they pick up the larvae on their hands.

Left untreated, roundworms in people can cause serious health problems when the larvae enter organs and other tissues, resulting in lung, brain, or liver damage. If the roundworm larva enters the eyes, permanent, partial blindness can result.

What are hookworms and how are they spread?

Hookworms are the second most common intestinal parasites found in dogs, but they are less commonly found in cats. Your pet can become infected when larvae penetrate the animal's skin or the lining of the mouth. An infected female dog can pass the infection to her puppies through her milk, but this does not occur in cats.

What are the health risks to pets and people?

Hookworms are dangerous parasites because they actually bite into the intestinal lining of an animal and suck blood. As with roundworms, puppies and kittens are at high risk of infection and developing severe disease. Left untreated, hookworm infections can result in potentially life-threatening blood loss, weakness, and malnutrition.

Like roundworms, hookworm infections are zoonotic, and infections usually occur by accidentally eating the larvae or by the larvae entering through the skin. In humans, hookworm infections cause health problems when the larvae penetrate the skin. The larvae produce severe itching and tunnel-like, red areas as they move through the skin and, if accidentally eaten, can cause intestinal problems.

What are whipworms and how are they spread?

These worms get their name from their whip-like shape. Animals with whipworms pass the infection along to other animals when the worm eggs develop into larvae and are passed in their feces (droppings). Your pet can pick up the infection by eating infected soil or licking their contaminated fur or paws.

What are the health risks to pets and people?

Like hookworms, whipworms bury their heads in the lining of an animal's intestine and suck blood, but they are generally less harmful and usually do not cause health problems. Occasionally, severe infections can develop and lead to diarrhea, weight loss, and blood loss. Whipworm larvae rarely infect humans when they are accidentally eaten.

What are tapeworms and how are they spread?

Tapeworms get their name because they are thin and flat, like strips of tape. Unlike the smooth-bodied roundworms, hookworms, and whipworms, tapeworms' bodies are actually made up of joined segments. Dogs and cats become infected with tapeworms when they eat infected fleas or lice. They can also get certain types of tapeworms by eating infected rodents.

What are the health risks to pets and people?

Tapeworms live in the small intestine and steal the nutrients from the food your dog or cat eats. An infection is usually diagnosed when the eggs sacs are seen under the pet's tail or on its stool. These sacs look like flattened grains of rice. Rarely are tapeworms a risk to people.

How can I prevent/treat worm infections?

Healthy pets may not show outward signs of a worm infection. However, if you notice a change in your pet's appetite or coat, diarrhea, or excessive coughing, see your veterinarian. In most cases, a simple fecal test can detect the presence of worm eggs or adults and, if present, your veterinarian will recommend a deworming program. A good way to prevent most worm infections is by using one of several monthly heartworm preventives available from your veterinarian. While there are several dewormers available that are effective against tapeworms, keeping your pet free of fleas is the best preventive.



Nursing female dogs and cats and their litters are also major sources for the spread of infective eggs and larvae. If you have a new puppy or kitten, or a pregnant pet, consult with your veterinarian about a deworming program that will reduce your family's risk of infection.

Worm infections in humans can be easily prevented by practicing good hygiene and sanitation. Children should be discouraged from eating dirt and should not be allowed to play in areas that are soiled with pet feces. Sandboxes should be covered when not in use. Adults and children should always wash their hands after handling soil and after contact with pets. Shoes should be worn when outside to protect feet from larvae present in the environment, and raw vegetables should be thoroughly washed because they may contain parasites from infected soil.

Dog droppings should be immediately picked up from public areas and from your yard to reduce the chances of contaminating the soil. Keeping cats indoors is an effective way to limit their risk of exposure to roundworms.