



Canine Core Vaccines

Distemper (DAP) and Rabies

The distemper vaccine is a multi-component vaccine. It is given to puppies starting at 6-8 weeks of age. An exam and booster vaccine are done every 3-4 weeks until 16-17 weeks of age. This frequent vaccine administration is necessary to keep puppies protected as the maternal antibodies disappear. This vaccine is boosted the following year, and then given every 3 years.

-Distemper is a widespread virus and is often fatal. This virus attacks the respiratory tract, gastrointestinal tract, skin and central nervous system. All dogs should be vaccinated for distemper as all ages are susceptible.

-Canine adenovirus can cause respiratory disease and hepatitis and can be fatal. This viral infection is rare now because of immunization.

-Parvovirus is a widespread, sometimes fatal disease which causes severe dehydration, diarrhea, and vomiting in dogs. This is especially true in younger dogs and unvaccinated dogs.

Rabies vaccine is first given at 12-16 weeks. The booster vaccine is given at 1 year. Thereafter, it is given every 3 years. Rabies is a lethal virus to all mammals, including people. It is prominent in wildlife of our area, so all dogs should be vaccinated. This vaccine is required by law for all dogs.



Canine Non-Core Vaccines

Leptospirosis: Infection from this bacterium may lead to liver and kidney disease or failure. The disease can be transmitted to people. If your pet is exposed to stagnant water, rats, mice, or wildlife, the leptospirosis vaccine should be given. Puppies can be given the vaccine at 9 weeks of age, followed by a booster vaccine every 3-4 weeks until they are approximately 16 weeks old. An annual booster vaccine is recommended.

Lyme: This disease is from an infection from the spirochete bacteria *Borrelia burgdorferi*. The deer tick transmits this organism to the dog via a bite; other mammals and people can also be infected. Infection results in symptoms of fever and joint pain, though the nervous system and kidneys can also be affected. The upper Midwest is heavily populated with ticks. If your pet spends any time outside or is in an area highly populated with wildlife, this vaccine is highly recommended. The vaccine is a safe recombinant vaccine, which can be started at 9 weeks of age and repeated every 3-4 weeks until approximately 16 weeks of age. Thereafter it is given annually.

Bordetella: This vaccine protects against the causative agent of kennel cough, *Bordetella bronchiseptica*. This bacteria causes a highly contagious upper respiratory infection. We use an oral vaccination that needs to be repeated yearly. It is recommended that all dogs which have extensive interaction with other dogs (such as grooming salons, boarding kennels, obedience classes, shows).

Flu: Just like people, dogs can be affected by certain strains of influenza. Currently there are two strains that seem to be affecting dogs. H3N8 was first noted in Florida and continues to pop up sporadically in different areas. H3N2 is a newer strain and was responsible for the flu outbreak in Chicago in 2015. It also continues to recur. Both strains are Influenza Type A and both are included in our flu vaccination. It is a vaccine that is given twice to begin with spaced 3 weeks apart then repeated annually. This vaccine may not completely prevent illness but it can help to make the illness less severe.



Neutering

What is neutering?

Neutering is a surgical procedure that removes the ovaries and uterus (ovariohysterectomy) in the female, and the testicles (castration) in the male. This permanent surgery sterilizes your pet so it cannot reproduce.

Why neuter my pet?

Sterilization of the female eliminates unwanted pregnancy, as well as eliminating heat cycles that occur on average every 6 months. It reduces the risk of mammary cancer that is linked to heat cycles, and it eliminates the risk of pyometra (infected uterus).

In the male, it reduces unwanted male behavior, such as urine marking and aggression, as well as roaming. It eliminates the risk of testicular tumors, and, also reduces the risk of prostatic infections. It does NOT reduce the risk of prostatic cancer.

When to neuter my pet?

There is no definitive “best” time to neuter your dog. Shelter animals are usually neutered before they are adopted, sometimes as early as 8 weeks of age. However, there is new evidence to support waiting much longer than that. Recent studies in Golden Retrievers and Labradors have shown that early neutering of both males and females may increase the incidence of certain cancers and orthopedic problems in these breeds. It is unknown how this applies to smaller breeds. However, multiple heat cycles may increase the incidence of mammary cancer and pyometra in female dogs. Unneutered males also have a higher rate of prostatic infections and testicular cancer. Taking all of these factors into account, it is now suggested that neutering at 6-12 months (depending on the size of the breed) may be a good compromise. Of course, if you do not have a safe place to keep your female when she is in heat, the risk of accidental pregnancy and pet overpopulation far outweighs the risk of later cancers. If you have concerns about your pet, please discuss it with us!

In cats, there is no clear evidence at this time that early neutering is detrimental in any way. We are still recommending surgical sterilization at 6 months for both male and female cats.

Will my pet get fat?

Surgical sterilization does not cause your pet to get fat. Diet, exercise, and heredity have much more influence on the weight of your pet. However, because your neutered pet does not have the caloric needs of an unneutered pet, they should be fed less in order to maintain the same weight.



Feeding Your Puppy

Shopping for pet food can be overwhelming. Should you buy organic, natural, grain free, or a diet with no by-products? Many popular brands spend more money on advertising and packaging than on the quality of ingredients. Other brands use gimmicks to make the food sound more appealing: for example, terms like grain-free, all natural, holistic and fresh. What is most important to your pet's diet is to feed a product that supplies the three essentials vitamins, minerals and energy supplying nutrients. At Black Dog Animal Hospital, we believe that pets should eat a good quality food that your pet likes and that suits your budget. A few recommended brands include Royal Canin, Science Diet, Purina, ProPlan and Nutro.

Be careful of foods that contain a lot of dyes or fat, which are often used to either make the product more palatable or appear more interesting to us as pet owners. Chicken meal is basically the entire chicken ground up into a meal. Chicken by-product meal uses the animal parts not consumed by people. By-products are a less expensive yet still nutritious protein source. Whole grains, fish meal, corn gluten meal, and brewers rice are other examples of inexpensive protein sources. Be sure the diet names the meat source. For example, chicken, beef or lamb. Avoid diets which list meat meal or meat by-products as the source of these meats is unknown.

We recommend that you feed your puppy 2-3 times daily and not leave food out all of the time (not the buffet style). This improves your odds of potty training your puppy and also allows you to quickly notice changes in your pet's appetite that could signal illness. Your puppy should eat a food reflective of their life stage and age.

Any pet food should be AAFCO labeled. AAFCO stands for Association of American Feed Control Officials defined as the voluntary membership association of local, state and federal agencies charged by law to regulate the sale and distribution of animal feeds and animal drug remedies. Essentially, they are the only group in the industry that has established a standard at which you as the consumer will know that your pet food is delivering the nutrients that it is formulated to provide.

For more information visit the website www.aaftco.org.

Treats

Treats count as calories for your young growing pet. They should be less than 10% of the daily calories. Try to use the smallest amount possible to encourage or reward. Save your pets favorite treats for longer training sessions or for tasks they are struggling with. Please avoid toxic items like chocolate, raisins, grapes, macadamia nuts, and onions.

Nutrition Websites & Resources

American Animal Hospital Association

<http://aahanet.org>

American College of Veterinary Nutrition

<http://acvn.com>

www.purina.com

www.hillspet.com

www.royalcanin.com

Petdoor: Nutritional requirements of Cats & Dogs: easy to read pet nutrition booklets

<http://dels.nas.edu/global/banr/petdoor>

Animal Nutrition Recourses - The American Academy of Veterinary Nutrition

www.aavn.org (Heading titled nutrition resources)

An indoor pet environmental enrichment guide

<http://indoorpet.osu.edu>



Is Pet Insurance Right for me?

The quality of veterinary care and the ability of veterinary specialists to perform advanced life-saving diagnostics and treatments have increased tremendously in the past several decades. With this increased availability of advanced care, costs have also risen. Orthopedic surgery for treatment of cranial cruciate ligaments injury or fractures can cost \$3000-\$6000; costs for treatment of intestinal disorders can be \$2000-\$4000, while treatment for complicated conditions and cancer can reach over \$10,000. Pet insurance is an option to assist with these costs so if something unexpected happens you will have the financial resources available.

Pet insurance is NOT a way to try to save money over the lifetime of your pet. While you can save money with extensive veterinary bills, you may lose money over the long run if your pet has no major health problems. Pet insurance helps you cover very expensive treatment costs without causing you financial hardship.

Pet insurance may be a good idea if:

- You treat your pet like a member of the family
- Your breed of pet is known to have health problems
- You become nervous thinking about veterinary bills
- You might not be able to afford the best care if your pet is sick or hurt
- You might compromise on care for financial reasons
- You have a healthy pet now but are concerned about problems that may arise later

Pet insurance may not be a good idea if:

- Your pet has medical problems already and you want to have them covered
- You are hoping pet insurance will reduce your overall costs
- Your pet already has or you already suspect a problem
- Finances would not make a difference in choosing what to do in case of illness
- You are mainly interested in pet insurance to cover wellness.



Dental Care

Oral hygiene is just as important for our pets as it is for the other members of your family. It is easier to start dental care when your pet is young, but any dog can be trained to have the teeth brushed daily. A puppy has 28 deciduous (temporary) teeth; adult teeth start to erupt at 4 months of age, and all 42 teeth should appear at 6-7 months of age. Some puppies may still retain their baby teeth at 6 months of age, which leaves no space for the permanent teeth to erupt. If this occurs, these retained deciduous teeth will need to be extracted.

Plaque and tartar accumulate on your pet's teeth at an early age. This plaque and tartar can lead to gingivitis (infection of the gum). If left untreated, the supporting structures of the tooth will be compromised leading to tooth decay, pain, and possible bone infection (periodontal disease). Approximately 85% of dogs over three years of age have some degree of periodontal disease. Poor dental health can lead to loss of teeth or accumulation of harmful bacteria, which may cause heart, kidney and liver disease. The key to prevent dental disease is to start dental care early!

Brushing your pet's teeth

Your dogs' teeth should be brushed once daily. With a puppy, pick a time of day when they are tired. Begin by letting your pet take the toothpaste-give a special reward when they try it! Slowly progress to touching their teeth (use your finger or fingerbrush), continue to reward and make it fun. Once you can touch all the teeth easily, advance to using a soft toothbrush; again, continue the reward. Wipe all teeth at the gum line from front and back, with strokes from the gum line to the tip of the tooth. Any fluoride-free toothpaste will work.

Brushing your pet's teeth and regular veterinary dental exams are the best ways of preventing tartar accumulation and periodontal disease. Dental chew toys can be of benefit, as can water additives. For more information on veterinary accepted chew toys and oral health, refer to the website www.VOHC.org.

We recommend that we examine your pet's teeth once a year. Remember, a healthy mouth is essential for the well-being of your pet.



Puppy Training

Prevent Bad Habits

Provide appropriate objects for chewing (Nylabone, Gumabone, Kong) and praise the puppy for chewing on these objects. It is best to rotate the toys every week, so the pup doesn't get bored. Be sure to correct inappropriate chewing by removing and presenting suitable chews. Put your pup in his or her crate when you're not able to directly supervise.

Do not allow aggressive behavior, i.e. mouthing hands, jumping up, growling, guarding food and nipping. Competition between dog and owner should never be developed, even when it is playful. "Rough housing" with a puppy is encouraging this kind of behavior and should not be viewed as "play". Appropriate play activities should involve toys, not your hands!

Exercise your puppy. Playing fetch and going for walks are great ways to tire your new puppy out. Remember, a tired puppy is usually a good puppy!

Do not allow jumping up. Never pet or talk sweetly to a dog that has only two feet on the ground. This is positively reinforcing the behavior. The best way to discourage jumping up is to encourage sitting down. Only reward your puppy with attention or treats once they are sitting down. Putting your knee up or hitting the dog under the chin may lead to increased jumping. Overall, to prevent bad habits, make definite decisions about manners and be sure everyone in the house is on the same page. Will the new dog be allowed on the furniture? Are any rooms off-limits?

Nothing is Free

The "nothing is free" technique helps you establish leadership and clear communication. The concept is to teach your dog that "nothing in life is free". Your pup must obey a command before he or she earns anything. This is not limited to only food rewards. The reward is what the dog wants in the situation, be it love, praise, going out, food, water, etc. Don't allow your puppy to be demanding in obnoxious ways or give in to their behavior. The only way your dog should get what he or she wants is by behaving properly.

Additional Tips and Training

The preceding ideas will help you lay a good foundation. Having a well-rounded list of commands will reinforce your puppy to have good manners. A foundation includes commands such as sit, stay, to come when called, and walking on a leash. Commands should be short, sweet and clear. Hand signals are a great method of communication or in conjunction with short spoken cues. Don't forget to reward good behavior daily. During puppyhood, it is easy to focus on the bad or frustrating things and forget to notice the good.

You can begin to train your puppy as early as 8 weeks of age. When beginning training, keep these few tips in mind:

- Be consistent: Commands, voice inflection, signals, corrections, and rewards should be consistent from all family members.

- Timing: Dogs associate rewards and corrections with the current actions taking place. Therefore, it is ineffective to reprimand a puppy for something, such as having an accident inside, long after the incident has occurred.

- Do not use force: A dog learns from the anticipation of the reward, not from the fear of the correction.

- Be patient: Don't expect every training session to be perfect. Remember clear and consistent repetition is the best way for a dog to learn.

- Less is more: Use less verbal language and more body language. Actions such as hand signals speak far louder than our words.

- Have fun: Training and interacting with your dog may be frustrating at times but should also be fun and something to look forward to. Training is one of the best ways to form trust between you and your dog, as well as, a forever bond.



Trimming your dog's nails:

You don't have to be nervous about trimming your dog's nails. You can learn to trim them without stressing your pet; all it takes is a little patience and training. Sometimes the training takes just minutes and other times you may need to practice for weeks with twice daily sessions. It depends on the pet. It is essential that your pet's nails are trimmed on a regular basis. Some potential problems if left untrimmed could be:

- Increased trips to the veterinarian's office because of pain or breakage

- Pain

- Abnormal gait or lameness

- Infection

- Nails can grow long enough that they curve back into the paw pads

- Long nails can scratch you and other members of your family

Both dogs and cats can be taught to allow, and even enjoy, the toenail trim process. Ideally, you start training your pet when they are young. This is no longer an option for those with adult pets. Fear not, an older pet can be trained. The key is to pair trimming with something positive that the pet likes such as a treat. Training is performed in steps and you must have patience with your pets.

Some pets are terrified at the sight of the toenail clippers. This is easily remedied. Place the trimmers near their food bowl so they will have to walk past and be near them every day when they eat. You can also put a treat, such as canned food, peanut butter or spray cheese, on the nail trimmer handles so the pet can lick the treat off every time they walk by. Do not do this if your trimmers are small or if your pet eats strange objects.

When your pet no longer displays fear at the sight of the trimmers, it's time to move on to the next step. The easiest step uses 2 people (one to give treats and one to handle the feet). First, have the pet sit in a comfortable position. Start by giving treats and rubbing just above the paw at the same time. The goal is to get the pet to focus on the food. After several seconds of massage, stop. Wait about five seconds and then repeat the procedure. You want to make it clear to your pet that their feet being handled equals treats.

When your pet is comfortable with this step, move on to the next step which involves handling the feet more vigorously while tapping the nails with the trimmers, and giving treats all the while. Next, practice putting the clippers over the nail so your pet becomes accustomed to the feel of the trimmers paired with treats. The final step is paring the actual toenail clipping action with the treats. These steps need to be taken on different days and worked up to.

Make sure to avoid clipping into the pink part of the nail that contains the blood vessel and nerves (quick) because if your pet has a painful experience while you're conditioning him, it will set the process back. In fact, in the beginning you should only trim off the very tips of your pet's nails. This allows your pet to get used to having his or her nails trimmed, and it will also be less stressful for you. During the conditioning period, it is very important for your pet to find the process pleasant and non-painful.



Flea and Tick Control in Dogs

Flea control for dogs:

Successful flea control involves both eliminating fleas from your dog and controlling fleas in the environment. Dogs and cats share the same fleas, and fleas can travel from one animal to another. Thus, it is important that all pets in your home are on a flea preventive program. With the many choices we have today, we can provide you with the safest and most effective flea prevention for your pet's needs. However, when it comes to environmental control, it is important to understand the flea life cycle.

Life cycle of the flea:

There are four stages to the flea life cycle: the egg, the larva, the pupae and the adult.

Flea eggs are whitish and about 0.5mm in length. Adult fleas lay eggs after taking a blood meal. The eggs are initially laid on the dog's skin but fall off into the environment, where they constitute approximately 50% of the total flea population. Eggs may hatch in 14-28 days depending on environmental conditions. High humidity and temperature are great conditions for hatching.

The flea larvae are about 2-5 mm in length. They feed on organic debris found in their environment. They dislike bright light and move deep into carpet fibers, wood cracks, or under furniture or organic debris. Flea larvae prefer warm, dark and moist areas. Our climate-controlled homes offer an ideal environment for the flea larvae to thrive.

The flea pupae produce a protective silk like cocoon that is sticky and well camouflaged. With warmth and humidity, pupae become adult fleas in 5-10 days. The adults do not emerge from the safety of this cocoon unless environmental conditions are right. Once fleas emerge from the cocoon they can only exist for a few days unless they are able to feed. Pre-emergent adult fleas can survive within the cocoon for up to 9 months. During this time, they are resistant to insecticides applied to the environment. This is important to remember because adult fleas may emerge from their pupae into the environment a considerable time after you apply insecticides in your home.

The flea adult, unlike the larvae, is attracted to light and movement, looking for a host to feed upon. Two days after the first blood meal, female fleas begin egg production. In normal circumstances the adult female will live up to three weeks, laying approximately 40 eggs per day. The entire life cycle, from egg to adult flea can be completed in as little as 14-28 days depending on environmental conditions.

Apart from irritation, are fleas harmful?

Fleas can cause anemia in heavy infestations, especially in young or debilitated dogs. A single female flea can consume up to 15 times her body weight in blood over the several weeks of her adult life. In addition, fleas can carry several diseases, including plague, and act as vectors (hosts) to spread one of the most common tapeworms of the dog and cat, *Dipylidium caninum*.

How do I prevent fleas on my dog?

There are several products that we carry that can help to prevent fleas from becoming a problem for your pet and your family. We can help you decide based on the unique needs of your pet depending on his/her lifestyle.

Tick control for dogs:

Ticks can cause a number of problems for your dog. Many diseases are transmitted by the tick including Lyme disease, Anaplasmosis, Rocky Mountain Spotted Fever and Ehrlichiosis. These diseases can be life threatening. An effective tick control program is essential to your dog's health. It is important in high risk areas to treat the environment as well as the pet.

Environmental control

Tick control in the environment will generally involve topical sprays containing insecticides. Always follow the label instructions for safety. You can also keep areas that your dog frequents mowed and avoid tall grasses.

Tick control for your dog

We carry many different types of tick control. We carry three types: oral tick control, tick collar, and topical liquid that is applied to the back of the neck. We can help you find the right fit for your family.



Heartworm Testing and Prevention, Parasite Prevention

Heartworm (*Dirofilaria immitis*) is a large spaghetti-like worm that lives in the heart and lungs of infected dogs and causes heart/respiratory failure. The life cycle of the heartworm is 6-8 months. Immature larvae are spread to dogs through a mosquito bite. Once in the dog's bloodstream, the larvae mature over the next 6 months, as they migrate from blood to the heart and lungs. Once the larvae reach adulthood, they breed, producing the first stage larvae called microfilaria. These larvae are free living in the blood-stream. Once a mosquito bites the infected dog, the larvae is ingested by the mosquito and matures to a stage called L3. The life-cycle starts again when the mosquito bites another dog.

All puppies should be started on heartworm preventative at 8-12 weeks of age. The dosage will be adjusted for weight as your puppy grows. The heartworm tablet is actually treating the early stage of heartworm infection, by killing the L3 stage larvae spread by the mosquito. We recommend Interceptor or Heartgard once monthly all year around. The main reason for that recommendation is that heartworm prevention also serves the goal of intestinal parasite control. Things such as roundworms, hookworms and (with Interceptor) tapeworms can be controlled with these preventatives.

Heartworm testing should be done around 1 year of age and is usually done at the first adult wellness exam.

Flea/Tick preventative

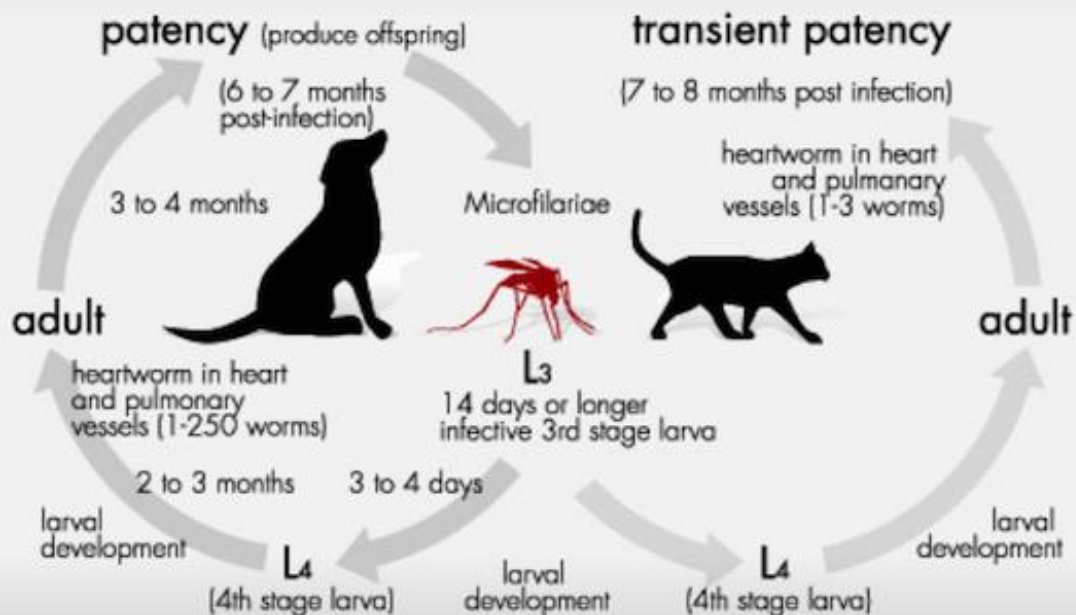
There are many products available for flea and tick control. Depending on the lifestyle of your pet we can help you navigate which would be the best product for your pet's needs.

Fecal Parasite Testing

A centrifuged fecal sample is recommended 1-2 times for all puppies and annually for adults to test for intestinal parasites. These parasites can cause malnutrition, anemia, gastrointestinal, and respiratory problems. A small, thumbnail size, fresh stool sample is required for testing. Many intestinal parasites shed eggs or cysts intermittently, which may result in a false negative stool sample. For this reason puppies are dewormed at least twice to treat roundworm and hookworm infections.

Puppies can be started on parasite prevention once they reach 8 weeks of age. We recommend Interceptor or Heartgard as heartworm/parasite preventatives. In addition to treating early heartworm infection these medications will also treat infections from some of the common intestinal parasites. This medication is given once monthly for the life of your pet.

HEARTWORM LIFE CYCLE





Toxic Foods to Avoid Feeding Your Pets

ASPCA Animal Poison Control Center Phone Number: (888)426-4435

1. **Alcohol** - Can cause vomiting, diarrhea, a decrease in coordination, central nervous system depression, difficulty breathing, tremors, abnormal blood acidity, coma, and even death
2. **Avocado** - Concern is for cardiovascular damage
3. **Chocolate, Coffee, and Caffeine** - Contains substances called methylxanthines. This substance can cause vomiting, diarrhea, panting, excessive thirst and urination, hyperactivity, abnormal heart rhythm, tremors, seizures and even death. Each type of chocolate contains a different amount of methylxanthine, with baking chocolate having the highest and white chocolate the lowest level.
4. **Citrus** - All aspects of the citrus plant contain different amounts of citric acid and essential oils that can cause irritation and possible central nervous system depression if consumed. If eating the fruit in small doses, tend to not present a problem other than minor stomach upset.
5. **Coconut and Coconut Oil** - The flesh and the milk of a fresh coconut do contain oils that tend to cause stomach upset, loose stools, and diarrhea. Coconut water is also high in potassium and it is not recommended to feed to your pet. Coconut and coconut-based products are not likely to cause significant harm to your pet.
6. **Grapes and Raisins** - Main concern is the cause of kidney failure due to the toxic substances within the fruit.
7. **Macadamia Nuts** - These can cause weakness, depression, vomiting, tremors, and hyperthermia. These symptoms can show up within 12 hours of ingestion and last up to 48 hours.
8. **Milk and Dairy** - Can cause diarrhea or other digestive upset.
9. **Nuts - Almonds, pecans, and walnuts** - can cause vomiting and diarrhea. It can also possibly cause pancreatitis in your pet.
10. **Onions, Garlic, and Chives** - Can cause gastrointestinal irritation which could end up leading to red blood cell damage and anemia.
11. **Raw/Undercooked Meat, Eggs, and Bones** - Main concern with bones is that it could cause the pet to choke on the bone or sustain an injury within the digestive

tract. Raw/Undercooked meat and raw eggs contain Salmonella and E. Coli which can be harmful to pets (as well as humans). Raw eggs also have an enzyme called Avidin which decreases the absorption of Biotin which can lead to skin and coat problems.

12. **Salt and Salty Snack Foods** - Ingested in large amounts can cause your pet to excessively drink and urinate. It can even cause sodium ion poisoning in your pet. Signs can also include vomiting, diarrhea, depression, tremors, elevated body temperatures, seizures, and even death.
13. **Xylitol** - This is a sweetener that is used in many products, specifically gum, candy, baked goods, and toothpaste. This can cause an insulin release in your pet which tends to lead to liver failure. The increase of insulin release can lead to hypoglycemia which lowers sugar levels. Signs include vomiting, lethargy, loss of coordination, and even seizures. Elevated liver enzymes and liver failure can show up within a few days.
14. **Yeast Dough** - Ingesting yeast dough can rise and cause gas to accumulate in the digestive system. It can be painful and cause the stomach to bloat, potentially twist, and turn into a life threatening emergency.