

Wignall Animal Hospital
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Public Health and Communicable Disease Discussion – Raw Meat Diets

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Raw food diets were discussed at the January meeting of the Public Health and Communicable Diseases Committee. Dr. Lisa Freeman, Tufts Cummings School of Veterinary Medicine's veterinary nutritionist, generously presented an insightful overview. The committee shares these highlights with MVMA members, as most practitioners have been asked about raw foods, and it can be a controversial matter. Dr. Freeman feels that raw food diets for pets should not be recommended for 4 good reasons.

1. **Nutritional Imbalance** – In a study Dr. Freeman conducted with another board-certified nutritionist, all 5 commercial and homemade raw food diets tested had multiple nutritional imbalances. Some of these imbalances (both deficiencies and excesses) could put a pet at risk for health problems, especially growing dogs. Although there are anecdotal reports of health problems caused by these nutritional imbalances (e.g., nutritional secondary hyperparathyroidism, growth deformities, anemia), few studies have been conducted. One study evaluated over 250 dogs eating raw meat diets and found elevated BUN, creatinine, and hematocrit levels. However, the long-term risks for adult dogs due to nutritional imbalances (as can be found with any homemade or improperly formulated commercial diet) require further study.
2. **Physical Dangers** – Pets fed these foods are at risk for broken teeth and gastrointestinal obstruction or perforation created by the bones incorporated into some of the diets.
3. **Bacterial Contamination** – There is increasing evidence and significant concern about the bacteria in the raw food diets, both for the pet eating the food as well as the people exposed to that pet. A 2003 paper documented two cats that died from sepsis due to *Salmonella* that was also isolated from their raw meat diet. At least 6 peer-reviewed publications have documented a high prevalence of bacteria in both homemade and commercial raw meat diets (e.g., *Salmonella*, *Campylobacter*, and even *E coli 0157:H7*). For example, studies have shown that between 20-80% of raw meat diets were contaminated with *Salmonella*. Studies also have shown significant shedding of these bacteria in the stool. A 2007 study demonstrated that dogs fed a single contaminated raw meat diet meal shed *Salmonella* in their stool for up to one week. These bacteria also have been shown to persist in dog bowls that have been through common (and sometimes quite intensive) sanitizing techniques. Therefore, this raises the question of liability, especially if an immune suppressed human or animal is exposed. For safety reasons, to both staff and other hospitalized animals, the

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Tufts Cummings School of Veterinary Medicine has a policy that bans raw meat diets in the Foster Hospital for Small Animals.

4. **Misconceptions** – An important consideration when answering client questions about these diets is to be aware of the evidence on both sides of the debate. Many proponents will claim nearly miraculous benefits of raw food diets. Yet, many of the perceived positive benefits may be due to factors other than the raw form of the food. For example, owners often note that the pet’s coat is improved when eating raw meat diets. This may be true, since the diets often contain a high fat content which results in shiny coats, but this can also be achieved through other safer avenues (e.g., fatty acids, higher fat cooked commercial diets). Dr. Freeman recommended asking owners why they are feeding these diets in order to clear up myths and misconceptions they have about commercial foods. This way, owners can make more informed decisions based on facts.

Dr. Freeman led discussion after the lecture. Refereed studies are not yet available regarding the lifespan of animals fed raw meat diets. Nor are there epidemiologic studies on the occurrence of gastrointestinal infections or other problems. Dr. Freeman feels scientific research is important, since most of the positive examples by the proponents of the diets have been anecdotal at best.

Dr. Freeman presented a fact sheet addressing the top ten myths about raw foods which will be available with permission from the Tufts Cummings School of Veterinary Medicine on the MVMA website below. Additional information is available on the American College of Veterinary Nutrition’s website is www.acvn.org.

Top Ten Myths about Raw Meat Diets

1. *“Their benefits are proven.”* No scientific studies have shown benefits of raw food diets. Their appeal is based on word of mouth, testimonial, and perceived benefits. For example, raw food diets may result in a shiny coat and small stools because they are generally high in fat and digestibility. However, these same properties can be achieved with commercial cooked diets without the risks of raw meat diets.
2. *“This is what animals eat in the wild.”* Wolves in the wild do eat raw meat (in addition to berries, plants, etc). However, the average lifespan for a wolf in the wild is only a few years. Therefore, what is nutritionally “optimal” for a wolf is not optimal for our pets that we hope will live long and have healthy lives.
3. *“Dogs and cats have short gastrointestinal tracts so won’t get infections from Salmonella in raw meat diets.”* Dogs’ and cats’ gastrointestinal tracts are not shorter compared to people when viewed in proportion to their smaller body size. Dogs and cats can become

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- infected with Salmonella and other bacteria found in raw meat diets, just as people can (especially young, old, or immune suppressed individuals).
4. *“Raw food diet ingredients are human grade.”* Even meats purchased at the best of stores for people can be infected with bacteria, so purchasing “human grade” does not protect against the health risks of uncooked meats (would you eat raw hamburger?). Also, be aware that the term “human grade” has no legal definition for pet food.
 5. *“Freezing raw diets kill bacteria.”* Most of the bacteria found in raw meat diets can easily survive freezing.
 6. *“As long as bones are raw, they’re safe.”* Bones, whether raw or cooked, can fracture dogs’ and cats’ teeth. Bone also block or tear the esophagus, stomach, or intestine.
 7. *“Cooking destroys enzymes needed for digestion.”* All the enzymes that dogs and cats (and people) need for digestion are already in the gastrointestinal tract. Therefore, additional enzymes from food are not required for digestion. In fact, enzymes are proteins, so any enzymes that are eaten get broken down by the body and have no benefit in the digestion process.
 8. *“Grains are added to pet foods as fillers.”* Corn, oats, rice, barley, and other grains are healthy ingredients that contain protein, vitamins, and minerals; they are not added as fillers. There is no benefit of potatoes, sweet potatoes, peas, or oatmeal compared to other carbohydrate sources, unless the animal has specific health problems.
 9. *“Most commercial pet foods contain harmful ingredients.”* By-products are the animal parts that Americans don’t typically eat, such as livers, kidneys, or lungs. There are specific definitions for what by-products can and cannot include. For example, by-products must be the clean parts of slaughtered animals and cannot include feathers, hair, horns, teeth, and hooves. Basically, by-products are anything other than animal muscle. Note that some pet foods may actually list these ingredients (e.g., duck liver, beef lung) but these are really just “by-products.”
 10. *“If bones or chicken necks are added to raw meat diets, they’re nutritionally balanced.”* Most homemade (and even some commercial) raw meats diets are extremely deficient in calcium and a variety of other nutrients, even if chicken necks, bones, or eggshells are added. This can be disastrous in any animal but especially in young, growing pets.