

## Raw vs. Cooked Food Diets and Bacteria Concerns

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The debate over which type of diet is best for dogs and other pets – raw meat-based or cooked meat-based – often stirs strong emotions and polarizes people into taking “sides”, often with no room for acceptance of the other viewpoint.

### Proponents of raw food diets cite numerous benefits, including:

- More closely mirrors the evolutionary diet of wolves and wild dogs.
- Dogs are carnivores designed to consume raw meat, bones and viscera.
- Dog guardian controls the ingredient selection and sourcing (with home-prepared raw diets).
- Higher in enzymes, vitamins and minerals than cooked foods.
- Greater nutrient availability than cooked foods.
- Improved skin and coat.
- Reduced or eliminated ear infections.
- Improved breath.
- Fewer, less bulky, less foul-smelling stools.
- Increased energy levels.
- Reduced incidences of chronic disease.
- Enhanced immune function and overall optimum health.

### Opponents of raw food diets cite negatives, including:

- May expose humans to higher levels of bacterial contamination.
- Lack of studies showing that raw-fed dogs live healthier, longer lives.
- Exposes vulnerable dogs to dangerous bacteria.
- Home-prepared raw meat-based diets are often unbalanced, with deficiencies and/or excesses of certain nutrients.
- Unbalanced raw diets are of particular concern with regard to growing puppies.
- Bones, even raw, pose risk of obstruction and perforation.

### Proponents of fresh, home-cooked diets cite numerous benefits, including:

- Dog guardian controls the ingredient selection and sourcing.
- Fresh, whole foods provide higher levels of nutrients than processed commercial foods.
- Nutrients contained in fresh foods are more bioavailable than those contained in processed commercial foods.
- Fresh meat, fruits and vegetables are more species-appropriate than commercial foods, especially kibble.
- Improved skin and coat.
- Reduced or eliminated ear infections.
- Improved breath.
- Fewer, less bulky, less foul-smelling stools than with commercial foods.
- Increased energy levels.
- Reduced incidences of chronic disease.
- Enhanced immune function and overall optimum health.

### Opponents of fresh, home-cooked diets cite numerous negatives, including:

- The main negative cited by opponents of home-cooked diets is that they are nutritionally unbalanced and can contribute to long-term vitamin/mineral deficiencies.
- Opponents are commonly those invested in the mass-market commercial pet food industry.
- Many mainstream veterinarians are also opposed to home-prepared diets.

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- We believe the vast majority mean well and are basing their beliefs on information provided by commercial pet food industry.

The main objection veterinarians typically raise regarding raw meat-based diets has more to do with human food safety issues than the validity of the diet for the animal. It goes without saying that proper food handling and safety techniques should be used when feeding a raw meat-based diet, just as they should when handling raw meat prior to cooking. In addition, vulnerable individuals, such as young children, the elderly, sick or immune-impaired people, young puppies or ill dogs should not be exposed to raw meat due to potential health risks. Common-sense precautions can greatly minimize the potential of bacterial contamination from raw food.

In our view, neither a raw nor cooked diet is inherently “better” than the other. We work with many dogs that thrive on raw food diets, and others that do not do well on raw foods but thrive on freshly prepared cooked foods. As we keep coming back to, every dog is an individual, and we believe that individual needs should outweigh a devotion to any one way of feeding.

### **Food Recalls**

Many of us prefer to believe that the foods we and our pets eat are healthy and safe, even if we and they overeat fatty foods or those with a high glycemic index (high sugars and starches). However, both the human and pet food industries have more recently been inundated with food recalls for contamination with microbes including bacteria, viruses and parasites. Every food type has been implicated, even candies.

### **Salmonella, Listeria, Campylobacter, and E. coli**

Food recalls in human and pet foods have primarily concerned contamination with Salmonella (many sources from animals, fish and plants), Listeria (mostly from bovine species), and Campylobacter bacteria, Hepatitis A virus in undercooked shellfish, and parasites.

The most recent pet food recall was for a cat food that was contaminated with both *Salmonella* and *Listeria spp.*, and caused acute illness in 2 kittens and one died. It should be noted that the U.S. Food and Drug Administration (FDA) quoted a study from 2004 and stated, “Although *L. monocytogenes* can infect many animal species, dogs and cats rarely get listeriosis and they usually don’t show signs of disease. One reference mentions only six reported cases in dogs from 1947 to 2000, and the dogs showed a wide range of signs.”

*Campylobacter spp.* are now considered to be major triggering agents of acute polyradiculoneuritis (APN), an immune-mediated peripheral nerve disorder in dogs that shares many similarities with Guillain-Barre syndrome in humans. However, there is little information about the relationship between APN and *Campylobacter spp.* in dogs. Potential risk factors were investigated, particularly consumption of raw chicken in 27 client-owned dogs suffering from suspected APN and 47 healthy dogs, client- or staff member owned. Where fecal samples were collected within 7 days from onset of clinical signs, APN cases were 9.4 times more likely to be positive for *Campylobacter spp.* compared to control dogs.

Further, a significant association was detected between dogs affected by APN and the consumption of raw chicken (96% of APN cases; 26% of control dogs). The most common *Campylobacter spp.* identified was *Campylobacter upsaliensis*. Thus, raw chicken consumption is clearly a risk factor in dogs for the development of APN, which potentially is mediated by infection with *Campylobacter spp.* Dr. Frieda Jorgensen, Public Health England, states 90% of Campylobacter cells are killed slowly by freezing,

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making it much less likely that the bacteria will be passed to humans. The temperature range for growth is 30- 45°C, with an optimum of 42°C. Survival at room temperature is poor, but *Campylobacter* can survive for a short time at refrigeration temperatures – up to 15 times longer at 2°C than at 20°C.

*Escherichia coli* is a common fecal contaminant that can be found in many consumed human and animal foods.

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