

Raw Food Diets—The Science

Veterinarians make medical decisions based on scientific facts. Scientific facts are attained by research, and are validated by publication in peer-reviewed scientific literature. Decisions are made based on these facts, and by using these facts to produce a benefit versus risk ratio for each clinical scenario. For example, the benefits of spaying or neutering most pets (based on scientific fact) far outweigh the risks, so your veterinarian will strongly recommend spaying or neutering. The same decision making process should occur in deciding whether or not to feed a raw food diet to a pet—that is, do the benefits of feeding such a diet outweigh any risks involved. Again, it is critical that scientific facts and not anecdotal statements (which possess no scientific value) are used to generate this risk versus benefit ratio. The following is a review of the science available regarding raw pet foods to aid in making a decision as to whether or not they should be fed.

Unfortunately, there is no scientifically validated data to prove that raw foods are effective in providing the multiple benefits they are touted to produce. Nor is there data to show that these diets are nutritionally complete and adequate for pets. Also, no data exists to prove that these diets are safe, either for the pet eating the food, or for people sharing an environment with such pets. There is mounting evidence to show that these foods are potentially not nutritionally complete, and that they may pose health concerns to pets, and to the people around them.

Only one study (1) has looked at the nutritional adequacy of these diets, and it found significant inadequacies and imbalances. The most important of these is likely an altered calcium to phosphorus ratio, which can have devastating effects on bone development, especially in growing pets. A large-scale review article (2) examined historical reports of bacterial pathogens present in raw foods. Bacteria such as Salmonella, Campylobacter, E coli 0157:H7 (the cause of “hamburger disease”), Yersinia enterocolitica, Listeria, Clostridium perfringens, Clostridium botulinum, Staphylococcus aureus, and Bacillus cereus, all potentially dangerous veterinary and human pathogens, were documented to be present in raw dog food.

Several reports have confirmed the presence of Salmonella in home prepared raw food (3), as well as in commercially sold raw food diets (4,5,6). Dogs consuming raw food diets have been proven to shed Salmonella bacteria in their stool (3,7) where it could potentially infect humans or other dogs. Alarming new reports have shown that the Salmonella isolated from the raw diets, and from the stool of dogs fed these diets have enhanced patterns of antimicrobial resistance (6,7,8). That is, the Salmonella has become resistant to antibiotics that have historically killed the bacteria.

Significant contamination of the environment with Salmonella has been documented in locations in which dogs have been fed raw food (9). Research has also shown that routine cleaning of dog bowls from pets fed raw food may not adequately kill the Salmonella present (10). After putting the dog food bowl through a cycle in a residential dishwasher or after soaking the bowl in a 10% bleach solution for five minutes,

Salmonella could still be cultured from at least 67% of the bowls. Health problems in pets ingesting raw foods have been reported, including documentation of the death of pets due to septicemia (blood poisoning) from Salmonella acquired from raw pet food (11).

Given the above peer-reviewed scientific information, and given the total lack of documentation of the efficacy, nutritional completeness or safety of these diets, the risk to benefit ratio of feeding raw foods weighs heavily on the risk side. That is, the risks of feeding raw food diets (given the scientific information presently available) very greatly outweigh any perceived benefits.

1. Freeman L, et al Journal of the American Veterinary Medical Association 2001
2. LeJune J, Journal of the American Veterinary Medical Association 2001
3. Joffe D, et al Canadian Veterinary Journal 2002
4. Strohmeier RA, et al CRWAD Proceedings 2004
5. Weese JS, et al Canadian Veterinary Journal 2005
6. Finley RL MSc Thesis Guelph Ont 2004
7. Finley RL, et al Canadian Veterinary Journal 2007
8. Murphy C, et al American College of Veterinary Internal Medicine abstract 2005
9. Morley PS, et al Journal of the American Veterinary Medical Association 2006
10. Weese JS, et al Canadian Veterinary Journal 2006
11. Stiver SL, et al Journal of the American Animal Hospital Association 2003

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