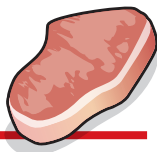


Introduction

The feeding of raw, meat-based diets (RMBDs) to dogs and cats is becoming increasingly popular among some pet owners who argue that it is a natural diet for their animals. There are two types of raw feeding: homemade raw diets and commercially prepared raw diets. Raw feeding, also called BARF (Bones and Raw Food or Biologically Appropriate Raw Food) consists of raw meat, offal and raw bone. Ingredients such as fruit, vegetables, oils, nuts, seeds and dietary supplements may also be added.

Benefits and disadvantages of feeding raw meat



Owners who feed RMBDs to their pets claim certain health benefits such as improved coat quality and well-being, stronger immune status and increased longevity. However, these benefits are mostly anecdotal and not supported by scientific studies.

Home-prepared raw diets can be variable in composition and therefore unbalanced and lacking in the correct nutrients. Consequently, feeding RMBDs can lead to serious health problems, especially in young growing animals. Several publications have reported risks associated with feeding raw diets including the development of clinical conditions such as hyperthyroidism and injuries such as perforation of the gastrointestinal tract and teeth fractures. Pathogens have also been isolated from homemade and commercially prepared raw diets and it is important not to underestimate the danger of transmitting disease-causing pathogens through RMBDs.

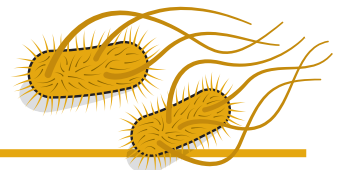


Infection risks for pets

The faeces of homemade RMBD-fed dogs may be contaminated with pathogenic bacteria such as *Salmonella*, *Campylobacter* and *Yersinia* whereas this bacterial species is not usually present in faeces of non-RMBD-fed dogs.

There may be consequences for pets, livestock and the general public if parasitic life cycles are enabled by feeding RMBDs. Several parasites depend on the ingestion of raw or undercooked animal-source protein by carnivores to complete their life cycles. Some of these parasites are zoonotic (e.g. *Toxocara* spp., *Toxoplasma gondii* and *Echinococcus granulosus*) and others a cause of significant economic losses for farmers if infected pets have access to livestock feed stores and pasture (e.g. *Taenia* spp., *Neospora caninum* and *Sarcocystis* spp.). However, freezing at -20°C for 1–2 days inactivates most parasites in meat.

Infection risks for humans



Companion animals who become infected after eating RMBDs can shed pathogenic/zoonotic bacteria in their faeces and transmit these to their owners by direct contact. Human infection can also occur by cross contamination of food in the kitchen. The presence of antibiotic-resistant bacteria has also been demonstrated in RMBDs.

Dogs who ingest raw offal containing hydatid cysts may go on to shed *E. granulosus* parasite eggs in their faeces. These are immediately infective to humans and can cause harmful hydatid cysts in a variety of organs. Cats ingesting *T. gondii* cysts in unfrozen raw meat may shed oocysts representing a human health risk, particularly to the unborn babies of pregnant women who have not previously been exposed to infection.

Good hygiene practice



Hygiene is extremely important when handling raw meat:

- Wash hands with soap and hot water after handling raw meat
- Wash all surfaces that have been in contact with raw meat
- Wash pet bowls and utensils with soap and hot water, rinse thoroughly and dry before the next use
- Store unsealed containers or open bags correctly to limit any risk of cross contamination

Conclusion

It is important to increase awareness of the potential health risks to pets from eating raw, meat-based diets and to owners handling the raw products. Pet owners should practise good personal hygiene and understand the need for proper handling of RMBDs. The single best thing to prevent infection is not to feed pets a raw diet. If raw diets are to be used, then processed, pre-frozen diets will minimise the risk of parasite transmission from meat and offal.

Protecting the health of pets, enhancing the safety of the public and preserving the human–animal bond