

Senior Dog

Feeding Senior Dogs

Aging is not a disease, although it is often associated with health problems. Nutrition can play a powerful role to help maintain health and optimal body condition, address age-related health issues before they occur, reduce the risk of weight gain or obesity, and possibly add more quality and longevity to a dog's life.



Key Messages

- Every dog ages at a different rate that varies by breed and body size, even though most dogs are considered "senior" at around 7 years of age.
 - While ultimately determined by genetics, aging can be influenced by nutrition, activity, health problems and environment.

Dog Breed Size	Age Considered Senior
Toy	9 years
Small	8 years
Medium	7 years
Large	6 years
Giant	5 years

Adapted from Nestlé Purina PetCare Communication Principles for Europe, Middle East & North Africa. (2015). p. 14.

- Age-related changes inside an aging dog's body may be occurring before external signs or behaviors are seen. These changes may include:
 - **Less efficient use of glucose for energy by the aging brain**, which can affect cognitive health (i.e., memory and learning). Mild cognitive impairment has been reported in dogs as young as 6 years old.
 - **A slower metabolism and lower activity level** that together result in lower energy (calorie) needs and increase the potential for excess weight gain unless an adjustment in the type or amount of food is made. Excess weight places additional stress on aging joints, increasing the risk of osteoarthritis.
 - **Less efficient protein metabolism**, which may result in loss of lean body mass (e.g., muscle). Less lean body mass contributes to a slower metabolism and may increase the risk for weight gain.

- A good time to discuss the benefits of senior diets is when a dog reaches about 7 years of age because targeted nutrition can proactively address some age-related changes. There are no established nutrient profiles for the senior dog life stage. However, several nutritional interventions have been shown to be beneficial:
 - Purina studies show dietary medium-chain triglycerides (MCTs) sourced from enhanced botanical oils can provide an alternative energy source for brain cells that may help support cognitive function in dogs as they age.
 - Increased levels of high-quality protein and reduced levels of fat and calories can help maintain optimal body condition and lean muscle mass.
 - Eicosapentaenoic acid (EPA), an omega-3 fatty acid found in fish oil, and glucosamine from natural sources help support joint health and mobility. Omega-3 fatty acids also may help reduce inflammation.
 - Antioxidants (e.g., vitamins C and E) and probiotics help support a healthy immune system, while probiotics and prebiotic fiber help promote healthy digestion.
- Aging dogs should be fed to maintain ideal body condition and preserve lean body mass for optimal health and longevity.

Additional Resources

Debraekeleer, J., Gross, K. L., & Zicker, S. C. (2010). Feeding mature adult dogs: Middle aged and older. In M.S. Hand, C. D. Thatcher, R. L. Remillard, P. Roudebush, & B. J. Novotny (Eds.). *Small animal clinical nutrition* (5th ed., pp. 273–280). Mark Morris Institute.

Kealy, R. D., Lawler, D. F., Ballam, J. M., Lust, G., Smith, G. K., Biery, D. N., & Olsson, S. E. (1997). Five-year longitudinal study on limited food consumption and development of osteoarthritis in coxofemoral joints of dogs. *Journal of the American Veterinary Medical Association*, 210(2), 222–225.

Kealy, R. D., Lawler, D. F., Ballam, J. M., Mantz, S. L., Biery, D. N., Greeley, E. H., Lust, G., Segre, M., Smith, G. K., & Stowe, H. D. (2002). Effects of diet restriction on life span and age-related changes in dogs. *Journal of the American Veterinary Medical Association*, 220(9), 1315–1320. doi: 10.2460/javma.2002.220.1315

Laflamme, D. P., Martineau, B., & Jones, W. (2000). Effect of age on maintenance energy requirements and apparent digestibility of canine diets. *Compendium of Continuing Education for the Practicing Veterinarian*, 22(Suppl 9A), 113.

Pan, Y., Larson, B., Araujo, J. A., Lau, W., de Rivera, C., Santana, R., Gore, A., & Milgram, N. W. (2010). Dietary supplementation with medium-chain TAG has long-lasting cognition-enhancing effects in aged dogs. *British Journal of Nutrition*, 103(12), 1746–1754. doi: 10.1017/S0007114510000097

Pan, Y., Kennedy, A. D., Jönsson, T. J., & Milgram, N. W. (2018). Cognitive enhancement in old dogs from dietary supplementation with a nutrient blend containing arginine, antioxidants, B vitamins and fish oil. *British Journal of Nutrition*, 119(3), 349–358. doi: 10.1017/S0007114517003464

Smith, G. K., Paster, E. R., Powers, M. Y., Lawler, D. F., Biery, D. N., Shofer, F. S., McKelvie, P. J., & Kealy, R. D. (2006). Lifelong diet restriction and radiographic evidence of osteoarthritis of the hip joint in dogs. *Journal of the American Veterinary Medical Association*, 229(5), 690–693. doi: 10.2460/javma.229.5.690

The Purina Institute aims to help put nutrition at the forefront of pet health discussions by providing user-friendly, science-based information that helps pets live longer, healthier lives.

 Purina Logo