

**Musculoskeletal Disorders**

FELINE OSTEOARTHRITIS

Osteoarthritis is a common joint disorder in cats. Although it occurs in young cats, the risk of osteoarthritis increases with advancing age.¹

Clinical signs of osteoarthritis include a reluctance to jump and/or a reduction in the height of jumps, inappropriate elimination (due to discomfort using the litterbox or in posturing during elimination), and an unkempt appearance due to less grooming. Although osteoarthritic cats may be less active, some cats with osteoarthritis are restless due to pain and thus are more active. Affected cats do not tend to exhibit overt lameness as is often seen in dogs with osteoarthritis.

In osteoarthritis, both inflammation and oxidative stress may contribute to cartilage and other joint tissue damage. A multimodal management approach including targeted nutrition can help support joint health in osteoarthritic cats.

**Key Messages**

- Maintaining cats in ideal body condition throughout life is important for joint health. In senior cats, when the risk of osteoarthritis is greatest:
 - Cats between the ages of 7-12 years old (the “mature” period of the senior life stage in cats) are most likely to be overweight or obese. In osteoarthritic cats that are overweight or obese, weight loss is key.
 - Weight loss reduces the extra mechanical stress placed on the joints by the excess weight.
 - Obesity is associated with chronic inflammation and increased production of free radicals, which may contribute to joint damage. Loss of excess weight reduces inflammation and oxidative stress.
 - Cats over the age of 12 (“geriatric” cats) are more likely to be underweight and may lose both fat and lean body mass. Preserving lean body mass and body weight by feeding a diet with increased levels of protein can help maintain supporting muscle strength.

DID YOU KNOW?

In one study, **100% of the cats over 10 years of age** had radiographic signs of osteoarthritis.¹

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Key Messages (continued)

- Although research in cats is very limited, diets containing key nutrients may be beneficial for arthritic cats:
 - Glucosamine and chondroitin sulfate are building blocks of cartilage and help support healthy joints.
 - The omega-3 fatty acids eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) have anti-inflammatory activity, which can reduce cartilage degradation and lameness.
 - A combination of the above plus green-lipped mussel extract (a New Zealand shellfish) improved mobility in arthritic cats.²
- Resources, including food and water bowls and litterboxes, should be placed where they are easily accessible to cats with limited mobility. Some cats with osteoarthritis may prefer their food and water bowls elevated several inches off the floor.

References

1. Lascelles, B. D. X., Henry, J. B., Brown, J., Robertson, I., Thomson Sumrell, A., Simpson, W., Wheeler, S., Hansen, B. D., Zamprogno, H., Freire, M., & Pease, A. (2010). Cross-sectional study of the prevalence of radiographic degenerative joint disease in domesticated cats. *Veterinary Surgery*, 39(5), 535–544. doi: 10.1111/j.1532-950X.2010.00708.x
2. Lascelles, B. D. X., DePuy, V., Thomson, A., Hansen, B., Marcellin-Little, D. J., Biourge, V., & Bauer, J. E. (2010). Evaluation of a therapeutic diet for feline degenerative joint disease. *Journal of Veterinary Internal Medicine*, 24, 487–495. doi: 10.1111/j.1939-1676.2010.0495.x

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