ActivPower CANIS

CANINE KNOWLEDGE BASE • INGREDIENT SCIENCE

MSM for Canine Joint Comfort & Mobility

A naturally occurring sulfur compound studied to support joint comfort, mobility, and normal inflammatory balance in dogs.

ActivPower ATLAS® for Dogs | Methylsulfonylmethane | Sulfur · Antioxidant

What Is MSM?

Methylsulfonylmethane (MSM) is a naturally occurring sulfur-containing compound found in small amounts in plants, animals, and certain foods. Sulfur is an important component of many biological structures, including connective-tissue proteins. Over several decades MSM has been studied for its role in supporting joint comfort, mobility, and recovery, and has become a common ingredient in joint formulations for both people and companion animals. It is included in **ActivPower ATLAS® for dogs** to support mobility, physical function, and overall wellness.

MSM & Normal Inflammatory Balance

MSM has been studied for its interaction with biological pathways associated with the body's normal inflammatory and oxidative processes — including oxidative-stress signaling, NF-κB pathways, cytokine activity, and cellular antioxidant systems (Butawan et al., 2017). For nutritional purposes MSM is best described as supporting normal inflammatory balance and healthy musculoskeletal function rather than treating joint disease.

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MSM in Canine Nutrition

MSM is widely incorporated into canine joint formulations, most often alongside other connective-tissue nutrients. The canine evidence base comes largely from multi-ingredient nutraceutical research and veterinary reviews.

Barbeau-Grégoire et al. (2022). A systematic review and meta-analysis of enriched diets and nutraceuticals in canine and feline osteoarthritis evaluated MSM among other joint-support ingredients.

McCarthy et al. (2007). A randomized, double-blind, positive-controlled canine trial demonstrated that oral connective-tissue nutraceuticals of this class can support joint outcomes in dogs with osteoarthritis.

Pye et al. (2024). A current review of non-pharmaceutical, non-surgical treatments for canine osteoarthritis summarizes the evidence for nutraceutical joint-support ingredients including MSM.

Because MSM is typically studied within combination formulas, MSM-alone canine trials remain limited; results should be interpreted as supporting MSM-containing nutritional strategies for canine mobility.

Mobility, Recovery & Everyday Activity

From a nutritional perspective, MSM is most appropriately described as supporting:

- Joint comfort and flexibility
- Mobility and physical function
- Healthy recovery following everyday physical activity
- Connective-tissue integrity and oxidative balance

Tissue Wellness & Healthy Aging

Proposed mechanisms for MSM include support for antioxidant defenses and maintenance of connective-tissue integrity. Ingredients that help maintain mobility and activity may contribute to quality of life as dogs age, though there is no evidence MSM extends lifespan.

Safety Profile

Published research generally reports MSM to be well tolerated when used appropriately. Reported effects are typically mild and may include digestive upset. Pet owners managing veterinary conditions should consult their veterinarian before introducing new supplements.

The ActivPower Perspective

ActivPower includes MSM in ATLAS® for dogs as part of a broader nutritional strategy supporting mobility, physical activity, and quality of life — one component of a comprehensive wellness program.

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FEATURED IN

ActivPower ATLAS® for Dogs

Selected References — Canine Literature

1. Barbeau-Grégoire M, Otis C, Cournoyer A, et al. A 2022 systematic review and meta-analysis of enriched therapeutic diets and nutraceuticals in canine and feline osteoarthritis. *Int J Mol Sci.* 2022;23(18):10384.

2. McCarthy G, O'Donovan J, Jones B, McAllister H, Seed M, Mooney C. Randomised double-blind, positive-controlled trial to assess the efficacy of glucosamine/chondroitin sulfate for the treatment of dogs with osteoarthritis. *Vet J.* 2007;174(1):54–61.

3. Bhathal A, Spryszak M, Louizos C, Frankel G. Glucosamine and chondroitin use in canines for osteoarthritis: a review. *Open Vet J.* 2017;7(1):36–49.

4. Pye C, Bruniges N, Peffers M, Comerford E. Current evidence for non-pharmaceutical, non-surgical treatments of canine osteoarthritis. *J Small Anim Pract.* 2024.

DISCLAIMER

This article is provided solely for educational and informational purposes and summarizes selected scientific literature concerning methylsulfonylmethane (MSM) as a nutritional ingredient in dogs. Nothing herein is intended to diagnose, treat, cure, mitigate, or prevent any disease, injury, arthritis, inflammatory disorder, or medical condition in animals.

Statements regarding dietary supplements have not been evaluated by the U.S. Food and Drug Administration (FDA). Individual responses may vary. Pet owners should consult a qualified veterinarian before introducing any new supplement or nutritional ingredient into an animal wellness program. No claim beyond the educational discussion of current scientific literature is stated or implied.

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