

Niacinamide Benefits

Niacinamide, also known as vitamin B3, is a water-soluble vitamin that has been shown to have several health benefits when taken orally. Some of the benefits of oral niacinamide include:

1. Supports skin health: Niacinamide has been found to be beneficial for the skin, as it helps to improve skin barrier function, reduce inflammation, and increase hydration.
2. Improves cardiovascular health: Niacinamide has been shown to help improve cholesterol levels and reduce the risk of cardiovascular disease. It may also help to improve blood pressure and reduce inflammation in the blood vessels.
3. Supports brain function: Niacinamide has been found to play a role in brain function, including improving memory and cognitive performance.
4. Helps with arthritis pain: Niacinamide has been shown to have anti-inflammatory properties, which may make it helpful in reducing joint pain and stiffness associated with arthritis.
5. Helps with diabetes: Niacinamide has been found to improve insulin sensitivity and reduce the risk of diabetes-related complications.

For Dogs:

Niacinamide is usually combined with doxycycline or tetracycline to help reduce the symptoms and inflammation caused by Immune-Mediated Skin Disorders like Lupus, Pemphigus, and Vasculitis.

As a general guideline, the recommended dose of niacinamide for dogs is:

1. For skin conditions: 500-1000 mg per day, divided into two or three doses.
2. For joint pain and inflammation: 250-500 mg per day, divided into two or three doses.
3. For digestive issues: 500-1000 mg per day, divided into two or three doses.
4. For immune system support: 250-500 mg per day, divided into two or three doses.
5. For diabetes: 500-1000 mg per day, divided into two or three doses.

Again, these are general guidelines, and the appropriate dose may vary depending on the individual dog and the condition being treated. Your veterinarian may recommend a different dose based on your dog's specific needs. It's important to always follow your veterinarian's instructions and dosing recommendations.

Pubmed Search:

<https://pubmed.ncbi.nlm.nih.gov/?term=niacinamide+treatment+&filter=pubt.review>

Small Animal Dermatology References:

[Muller and Kirk's Small Animal Dermatology - 9781416000280](https://www.elsevier.com/books/muller-and-kirks-small-animal-dermatology/miller/978-1-4160-0028-0)

<https://www.elsevier.com/books/muller-and-kirks-small-animal-dermatology/miller/978-1-4160-0028-0>

[Small Animal Dermatology - 9780323376518](https://www.elsevier.com/books/muller-and-kirks-small-animal-dermatology/miller/978-1-4160-0028-0)

[https://](https://www.elsevier.com/books/muller-and-kirks-small-animal-dermatology/miller/978-1-4160-0028-0)

Immune-mediated skin disease

<https://www.dvm360.com/view/tetracyclines-and-niacinamide-canine-dermatology-proceedings>

1. Decrease T-lymphocyte blastogenic responses to mitogens.
2. Inhibit phosphodiesterase.
3. Inhibit proteases.
4. Prevent mast cell degranulation.
5. Block antigen/IgE-induced histamine release.

The combination of tetracycline and niacinamide was initially used to treat certain canine autoimmune diseases: cutaneous (discoid) lupus erythematosus, pemphigus erythematosus, pemphigus foliaceus, and bullous pemphigoid. It was subsequently reported to be efficacious in some cases of lupoid onychitis, vasculitis, vesicular cutaneous lupus erythematosus (collies and shelties), exfoliative lupus erythematosus (German shorthair pointers), uveodermatologic syndrome (aka Vogt-Koyanagi-Harada syndrome), mucous membrane pemphigoid, various sterile granulomatous disorders (sterile granuloma-pyogranuloma syndrome; panniculitis; metatarsal fistulae), and cutaneous histiocytosis.

<https://www.dvm360.com/view/tetracyclines-and-niacinamide-canine-dermatology-proceedings>

[Evidence-base for the beneficial effect of nutraceuticals in canine dermatological immune-mediated inflammatory diseases - A literature review](https://pubmed.ncbi.nlm.nih.gov/36938651/)
<https://pubmed.ncbi.nlm.nih.gov/36938651/>

[Pemphigus: current therapy](https://pubmed.ncbi.nlm.nih.gov/15030557/)
<https://pubmed.ncbi.nlm.nih.gov/15030557/>

Mueller RS, Rosychuk RAW, Jonas LD. A retrospective study regarding the treatment of lupoid onychodystrophy in 30 dogs and literature review. *Journal of the American Animal Hospital Association* 2003; 39:139.

Skin Benefits

<https://pubmed.ncbi.nlm.nih.gov/28052374/>

The use of nicotinamide for various dermatological indications, including nonmelanoma cancer prophylaxis, blistering disorders, acne vulgaris and cosmetic indications, and speculate upon its future role in dermatological practice.

<https://pubmed.ncbi.nlm.nih.gov/28052374/>

Skin Benefits of Topicals

<https://pubmed.ncbi.nlm.nih.gov/24993939/>

Niacinamide has antipruritic, antimicrobial, vasoactive, photo-protective, sebostatic and lightening effects depending on its concentration.

<https://pubmed.ncbi.nlm.nih.gov/24993939/>

[A review of nicotinamide: treatment of skin diseases and potential side effects](https://pubmed.ncbi.nlm.nih.gov/25399625/)

<https://pubmed.ncbi.nlm.nih.gov/25399625/>

Niacinamide combined with Tetracycline

Beningo KE, Scott DW, Miller WH, et al. Observations on the use of tetracycline and niacinamide as antipruritic agents in atopic dogs. *Canadian Veterinary Journal* 1999; 40:268.

Mueller RS, Fieseler KV, Bettenay SV, et al. Influence of long-term treatment with tetracycline and niacinamide on antibody production in dogs with discoid lupus erythematosus. *American Journal of Veterinary Research* 2002; 63:491.

Mueller RS, Rosychuk RAW, Jonas LD. A retrospective study regarding the treatment of lupoid onychodystrophy in 30 dogs and literature review. *Journal of the American Animal Hospital Association* 2003; 39:139.

Murayama N, et al. Tetracycline and niacinamide for the treatment of idiopathic sterile granuloma and pyogranuloma in two dogs. *Japanese Journal of Veterinary Dermatology* 2003; 9:127.

Scott DW, Miller Wh, Griffin CE. Muller & Kirk's Small Animal Dermatology, 6th ed. WB Saunders, Philadelphia, 2001; p 677.

White SD, Rosychuk RAW, Reinke SI, et al. Use of tetracycline and niacinamide for treatment of autoimmune skin disease in 31 dogs. *Journal of the American Veterinary Medical Association* 1992; 200:1497.