Vitamin A (Retinol) Benefits

General Benefits

Vitamin A (retinol) is THE MOST IMPORTANT supplement for the Skin and Glands. Vitamin A has an amazing "Health" promoting effect on the Hair, Skin, Glands, and Nails. Vitamin A makes the skin and glands more normal; meaning if the skin and glands are too slow the Vitamin A will increase their function and if the skin and glands are too fast the Vitamin A will slow them down.

Vitamin A is essential for maintaining healthy vision, skin, immune system function, reproduction, and cell communication.

- 1. Immune system: Vitamin A supports the immune system by helping to develop and maintain the cells that fight off infections.
- 2. Skin health: Vitamin A helps to keep the skin healthy and may be used to treat skin conditions such as acne, psoriasis, and eczema.
- 3. Cancer prevention: Some studies suggest that vitamin A may help prevent certain types of cancer.

In dogs, retinol therapy may be used to treat skin conditions such as dry skin, dermatitis, and hair loss. It can also help improve the condition of the skin and coat, and may aid in wound healing.

Dog Skin Disorders

Doodle Dandruff Sebaceous Adenitis Old Dog Warts Schnauzer Bumps Schnauzer Comedo Syndrome Ichthyosis Seborrhea Vitamin A Responsive Dermatitis Cocker Spaniel Seborrhea Ear Margin Dermatosis Sebaceous Gland Adenoma Acne

Dose Recommendations

Typically, a dosage of 2,000 to 4,000 IU of vitamin A per day is recommended for a dog weighing 10 pounds with sebaceous adenitis or seborrhea.

It is important to follow the recommended dosage guidelines and to consult with a veterinarian before administering retinol therapy to your dog. The toxic dose of vitamin A in dogs is generally considered to be around 4,000 to 8,000 IU per kilogram of body weight per day

General Data Links:

Small Animal Dermatology References:

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

Small Animal Dermatology - 9780323376518 https://www.us.elsevierhealth.com/small-animal-dermatology-9780323376518.html

PubMed Research Results Summary

https://pubmed.ncbi.nlm.nih.gov/?term=vitamin+a+treatment&filter=pubt.review

Vitamin A in Skin and Hair: An Update https://pubmed.ncbi.nlm.nih.gov/35889909/

Keratinization Defects, Seborrhea and Dandruff

<u>Canine ichthyosis and related disorders of cornification in small animals - PMC https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3529142/</u>

Oral vitamin A as an adjunct treatment for canine sebaceous adenitis Doses varied from 380 to 2667 IU/kg/day, with a mean of 1037 IU/kg/day. https://pubmed.ncbi.nlm.nih.gov/21599767/

Applied dermatology: sebaceous adenitis in dogs https://pubmed.ncbi.nlm.nih.gov/23532758/

Impact of Nutritional Supplementation on Canine Dermatological Disorders - PMC https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7355824/

https://pubmed.ncbi.nlm.nih.gov/?term=vitamin+A+or+retinol+sebaceous+adenitis&filter =pubt.review

Immune Support

Vitamin A: The Key to A Tolerant Immune System? | Clinical Education https://www.clinicaleducation.org/resources/reviews/vitamin-a-the-key-to-a-tolerant-imm une-system/

<u>The Role of Vitamin A in Your Immune System - In and Out Express Care</u> <u>https://inandoutexpresscare.com/the-role-of-vitamin-a-in-your-immune-system/</u>

Effects of Vitamin A Supplementation on Immune Responses and Correlation with <u>Clinical Outcomes</u> <u>https://journals.asm.org/doi/10.1128/CMR.18.3.446-464.2005</u>

Infections

Illuminating the Role of Vitamin A in Skin Innate Immunity and the Skin Microbiome: A Narrative Review

Review of the role of vitamin A and its derivatives on innate immune regulators through mechanisms that promote skin immunity and sustain the skin microbiome. <u>https://pubmed.ncbi.nlm.nih.gov/33494277/</u> <u>Topical vitamin A treatment of recalcitrant common warts - PMC</u> <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3274422/</u>

Vitamin A at the interface of host-commensal-pathogen interactions - PMC

Vitamin A is central to immune homeostasis in the gut, coordinating both innate and adaptive immunity. VitaminA stimulates the migration of immune cells including dendritic cells, T cells, and B cells to the intestine and helps inform their function. Vitamin A directly regulates proliferation and differentiation in the intestinal epithelium, which is crucial to the maintenance of the gut barrier.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6553882/

Cancer Prevention

The use of nutraceuticals in cancer therapy

Other nutraceuticals of interest in patients with cancer include antioxidant vitamins, trace minerals, glutamine, protease inhibitors, garlic, tea polyphenols, vitamin A, and shark cartilage.

https://pubmed.ncbi.nlm.nih.gov/15032131/

Vitamins A, B, C, and D: A Short Review for the Dermatologist https://pubmed.ncbi.nlm.nih.gov/33245705/