

# Nourish for Shine: The Key to Dog Skin Health

Guest blog by Dr Emmanuel Fontaine, Scientific Communications Veterinarian at Royal Canin North America

*I have attended countless dog shows... and yet, I'm always struck by the sheer dedication of breeders and handlers. The energy in the grooming area is palpable as they meticulously prepare their dogs, paying particular attention to every detail. One thing that never fails to amaze me is the time and effort spent on the dog's coat. It's clear that a beautiful, glossy coat can set a dog apart in the show ring... but here's the thing: the work that goes into achieving that stunning coat doesn't start in the grooming area. It begins much earlier, with something far more foundational—nutrition. So in this blog, we'll explore the key nutritional strategies that can help optimize your dog's coat well before show day!*

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## Building the Foundation: Protein and Amino Acids

To achieve a strong, vibrant coat, it all starts with protein. **Protein is the foundation of a healthy coat**, with up to 95% of hair being composed of it. But it's not just about any protein; **high-quality, highly digestible protein** is crucial as it directly supports the production of keratin, the key structural protein in hair. In fact, **at least 30% of your dog's daily protein intake goes toward skin and hair renewal**.

Within this protein, **sulfur-containing amino acids** like methionine and cysteine play a pivotal role. These amino acids are the building blocks of proteins, essential for keratin production. They **prevent brittleness and enhance the shine of your dog's coat**, ensuring it remains strong and resilient.

For dog breeders and handlers, the practical consequence is clear: prioritize a diet that provides ample high-quality, easily digestible protein, rich in sulfur-containing amino acids like methionine and cysteine.

## Nourishing the Skin: Essential Fatty Acids and Vitamins

**Essential fatty acids** are another cornerstone of skin and coat health.

These nutrients, including **omega-6s (like linoleic acid and gamma-linolenic acid)** and **omega-3s (EPA, DHA)**, are vital because your dog's body can't produce them on its own. They must be obtained through diet.

- **Linoleic Acid** is non-negotiable; it's crucial for **maintaining skin moisture** and giving the coat that glossy finish. Without it, the coat can become dry and dull.
- **Gamma-Linolenic Acid** is particularly important for managing **skin inflammation** and ensuring your dog's coat stays healthy and vibrant.

- **Omega-3 Fatty Acids (EPA and DHA)** work to **reduce inflammation** and support overall skin health, ensuring your dog's coat remains smooth and irritation-free.

Additionally, **Arachidonic Acid**, an omega-6 fatty acid synthesized from linoleic acid, is vital for **skin cell growth and repair**. Though your dog's body can make it from linoleic acid, some diets may include it directly to give an extra boost to skin health.

While these nutrients are critical for a healthy, vibrant coat, over-supplementation can disrupt this delicate balance, leading to issues like inflammation or an imbalanced skin barrier. Rather than adding supplements haphazardly, it's best to start with a diet that is already enriched with omega-6s and omega-3s. This ensures your dog receives the right proportions needed for optimal skin and coat health without the risks associated with overloading on any one nutrient. Remember, when it comes to nutrition, balance is key.

## Supporting and Protecting: Vitamins and Minerals

Vitamins and minerals are the unsung heroes in the quest for a stunning coat. **Vitamin A** is essential for **regulating skin cell turnover** and managing conditions like dandruff, keeping the skin smooth and healthy.

**Vitamin E** plays a dual role as a powerful **antioxidant**, protecting skin cells from oxidative damage and supporting the immune system. This vitamin helps to keep your dog's skin resilient against environmental stressors.

For that extra shine and strength, **Biotin (Vitamin H)** is a must. It supports **fatty acid synthesis**, which is critical for maintaining a **strong, shiny coat** as we already mentioned. Meanwhile, **B Vitamins**—particularly B5 (pantothenic acid), B6 (pyridoxine), and B2 (riboflavin)—are vital for **metabolism and energy production**, directly impacting the health of your dog's skin and hair.

**Zinc** and **Copper** are the minerals that ensure your dog's coat looks its best. **Zinc** is essential for **skin repair and regeneration**, preventing issues like hair loss and skin lesions. On the other hand, **Copper** is crucial for **melanin production**, ensuring that your dog's coat retains its rich, vibrant color.

Lastly, **Choline** and **Histidine** round out this nutritional powerhouse.

**Choline** is a key component in building and maintaining healthy **cell membranes**, crucial for skin cell turnover and repair. **Histidine**, an essential amino acid, supports the production of filaggrin, a protein that is vital for **maintaining a strong skin barrier**.

For dog breeders and handlers, the practical takeaway is here again to ensure your dog's diet is rich in the right balance of vitamins and minerals, as they play a crucial role in skin and coat health.

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*In this blog, we've explored the essential nutrients that play a pivotal role in optimizing your dog's skin health and coat beauty. These nutrients—proteins, fatty acids, vitamins, and minerals—are the foundation of a vibrant, resilient coat. However, it's crucial to remember that this is just one piece of the nutritional puzzle. Nutrition isn't just about what's in the diet; it's also about how much is fed and how it's fed.*

*To truly unlock the full potential of nutrition, you must focus on all three aspects: the quality of the diet, the quantity of food, and the feeding practices. This holistic approach is especially important in ensuring your dog not only looks their best but feels their best too. By carefully balancing these elements, you can fully harness the power of nutrition to optimize your dog's skin health and coat condition. After all, when it comes to achieving a show-stopping coat, every detail counts.*

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