

Overview/description

The Great Wall – How to build and maintain the skin barrier through nutrition

What is the skin barrier? Why is it important? What should healthy skin look like? What key nutrients are required to build and maintain the skin barrier?

During this webcast, Drs. Charlie Pye and Catherine Ruggiero will answer these questions and more as they examine the benefits of adequate nutrition for pets with skin issues.

Learn from our experts as they present:

- an overview of the different skin layers as well as key structures;
- the different functions of the skin barrier;
- a comparison and contrast between healthy and unhealthy skin;
- an overview of the different key nutrients required to build and maintain the skin barrier and how they impact the
- skin's different structures;
- a shared case example managed through multimodal therapy and nutrition.

Speaker's bio and credentials



Charlie Pye, BSc, DVM, DVSc, Dipl. ACVD

Dr. Charlie Pye received her Doctorate of Veterinary Medicine from the Atlantic Veterinary College. She then moved to Saskatoon for a rotating internship at the Western College of Veterinary Medicine. Following her internship, she travelled back for a Dermatology Residency at the Ontario Veterinary College. While at OVC, she also

completed her Doctorate of Veterinary Science degree specializing in bacterial biofilms. After passing boards she began working at Guelph Veterinary Specialty Hospital, a private referral practice in Ontario; also travelling back to PEI to teach the veterinary students a few times a year. As of May 2018, she joined the team at the Atlantic Veterinary College as an assistant professor and established the first-ever Dermatology service at AVC. She has lectured all over North America and has contributed to multiple journals and textbooks. She is also currently the treasurer for the Canadian Academy of Veterinary Dermatology.



Catherine Ruggiero, MS, DVM, Dipl. ACVIM (nutrition)

Dr. Catherine Ruggiero is a board-certified veterinary nutritionist® and Scientific ommunications Specialist for Hill's. She completed her Doctor of Veterinary Medicine training at the University of Missouri in 2014. Before that, she received a Bachelor of Science at St. Lawrence University and a Master of Science in Biological Sciences at

Fordham University. She was an associate veterinarian at a small animal veterinary practice in Upstate New York for just over three years before returning to the University of Missouri to pursue residency training in small animal clinical nutrition. Upon completion of an ACVN residency program in 2019, Dr. Ruggiero joined Hill's Pet Nutrition as a Consulting Clinician in VCS and is currently working in Scientific Affairs.



Questionnaire

- 1. What ingredient is an example of a concentrated source of anti-inflammatory (omega-3) polyunsaturated fatty acids?
 - o Corn oil
 - o Egg
 - o Fruits & veggies
 - Marine fish oil
- 2. What is the easiest and safest way to ensure dogs receive all of the important nutrients for skin health in the right amount and balance?
 - o Supplement each nutrient individually in calculated amounts
 - Feed a complete and balanced food specifically formulated for skin disease
 - o Administer a canine multivitamin with fish oil
 - o Feed a home-prepared diet
- 3. Which of the following statements about Prescription Diet Derm Complete is FALSE?
 - o It is a part of multi-modal therapy for atopic dermatitis
 - o It contains ingredients including polyphenols and essential fatty acids
 - o It can only be used for dogs with atopic dermatitis and is not helpful for dogs with adverse food reactions
 - o It is supported by studies that show improvement in skin healing and sleep scores
- 4. Which is the most important consideration for dietary protein in skin conditions?
 - Protein quality
 - Protein source (ingredient)
 - o Protein amount
 - All of the above
- 5. Which of the following statements about Hill's Prescription Diet Derm Complete is TRUE?
 - It is available for adult dogs, only
 - o It is NOT complete and balanced, and therefore should NOT be fed long-term
 - Efficacy is supported by multiple clinical studies, including dogs with food allergies and environmental allergies
 - The main ingredient protein source is fish
- 6. Which of the following are the layers of the epidermis in haired skin?
 - o Stratum corneum, stratum lucidum, stratum spinosum, stratum basale
 - o Stratum corneum, stratum lucidum, stratum granulosum, stratum spinosum, stratum basale
 - o Stratum corneum, stratum granulosum, stratum spinosum, stratum epidum, stratum basale
 - Stratum corneum, stratum granulosum, stratum spinosum, stratum basale
 - O Stratum corneum, stratum lucidum, stratum granulosum, stratum basale



7. True or false: Ceramides are the largest group of lipids in the epidermis.

True

o False	
 8. Which of the following is NOT a function of the skin? Sensation Thermoregulation Synthesis of hormones Storage of vitamins Protection from fluid loss 	
 9. True or false: Epidermal turnover is slower in seborrheic dogs than dogs with healthy skin. True False 	
 10. Which of the following is noted when individuals have a defective skin barrier? Increased epidermal water loss Decreased blood flow in the dermis Interruptions of the hair cycle Decreased sebum production Lack of apocrine glands in the skin 	
PERSONAL INFORMATION:	
First name:	
Last name:	
Type:	
(Veterinarian, Technician)	
Licence number:	
Province where you practise:	
Email:	



CERTIFICATE OF COMPLETION

Educational webcast

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Presented by

Charlie Pye, BSc, DVM, DVSc, Dipl. ACVD and Catherine Ruggiero, MS, DVM, Dipl. ACVIM (nutrition)

This document confirms that

Dr. Lorem Ipsum

has viewed the above-mentioned webcast and has answered and submitted the questionnaire meant to evaluate the understanding of the content.

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