PAW BY BLACKMORES NUTRIDERM®

REPLENISHING CONDITIONER

NutriDerm® Replenishing Conditioner is an advanced way to moisturise, nourish and nurture a pet's skin while providing a soft and manageable coat. Containing nourishing Cerasine® skin nutrient complex (a combination of ceramides, phytosphingosine and essential fatty acid nutrients), this product is suitable for dogs and cats with normal, dry and itchy skin.

BENEFITS:

- **Contains Cerasine®**, an innovative skin nutrient complex containing ceramides, essential fatty acids and phytosphingosine to intensively nourish the skin for optimal skin hydration and a healthy skin barrier.
- **Colloidal oatmeal** for immediate soothing effect.
- **Moisturising & detangling** ingredients: for a soft, manageable coat.
- **No artificial fragrances** for a natural fresh scent.
- **Highly versatile** with three different application options.

WHEN TO RECOMMEND:

- Dogs & cats that require replenishment of the skin barrier.
- Dogs & cats with itchy, dry or normal skin.

Contains:

Active Ingredient	Amount
Colloidal Oatmeal	21g/L
Cerasine® Complex	5g/L
Jojoba Oil	5g/L
Avocado Oil	5g/L
Shea Butter	5g/L
Rosemary leaf extract	1g/L
Rosehip Oil	3g/L

Size: 200ml tube & 500ml bottle. Also available as duo pack with PAW NutriDerm® Replenishing Shampoo - 2x 200ml in a box OR as duo pack with PAW MediDerm® Gentle Medicated Shampoo - 2x 200ml in a box.

Application: Use for bathing every 1 to 2 weeks. Wet animal thoroughly with clean water. Apply PAW NutriDerm® Replenishing Conditioner at several points and gently massage evenly through the coat and onto the skin to form a rich even lather. Leave on for 5 minutes, and then rinse with clean water. Alternatively, use as a leave on directly from the tube/bottle or diluted and sprayed on (1 part conditioner: 2 parts water). For best results when used as a leave on, apply daily.

EDUCATION

Ceramides

The permeable skin barrier is mainly localised to the outermost epidermal layer, or stratum corneum, which consists of corneocytes surrounded by a hydrophobic, lipid-rich extracellular matrix. The corneocytes provide the mechanical toughness of the skin and the matrix prevents water and electrolyte loss.[1] Half of the total lipid mass in the stratum corneum consists of ceramides – a waxy molecule comprised of a fatty acid covalently bound to a sphingoid base[1], a quarter is cholesterol, and 15% is free fatty acids[2]. Changes in these components can lead to a disruption of skin barrier function.

In veterinary medicine, evidence about skin barrier impairment has accumulated rapidly since 2001.[3] By 2009–10, further studies had found decreased ceramides and altered stratum corneum structure in dogs with atopic dermatitis.[4,5] Thus, a new paradigm was advanced, positing that similar to humans, a primary defect of skin barrier function also exists in subsets of atopic dogs and in sites predisposed to developing lesions.[6] Moreover, development of lesions aggravates skin barrier changes, with widening of intercellular spaces, release of lamellar bodies and disorganisation of lipid cells.[6]

Trials of topical ceramide-rich preparations in dogs with atopic dermatitis have demonstrated beneficial effects on endpoints such as clinical signs, increased ceramide content and lamellar bodies, and/or reduced transepidermal water loss.[7-12]

Colloidal oatmeal

Colloidal oatmeal (CO) is relatively new, emerging in commercial form in 1945 by boiling finely ground whole-oat kernels or groats to extract the colloidal material.[13] The composition of CO is largely polysaccharide starch (65–85%), protein (15–20%), lipids (3–11%), fibre (5%) and beta-glucans (5%). Antioxidant flavonoids, vitamins, alkaloids, saponins and sterols appear throughout the macronutrients. This chemical heterogeneity, is credited with CO's multimodal topical actions on inflammatory dermatological conditions.[14]

Based on human research and traditional empirical evidence, colloidal oatmeal is used in veterinary shampoos, sprays and rinses. It behaves as a humectant moisturiser or hygroscopic agent, incorporated into a dehydrated stratum corneum to attract and retain moisture. Fine particles of polysaccharide starch are deposited on the skin to form an occlusive and water-binding colloidal film that retains moisture in the stratum corneum, so improving dry skin conditions.[15] Colloidal oatmeal can also act to buffer the pH of the skin.[16] The complex beta-glucan fibre mucilage within CO is demulcent and antipruritic; forming an occlusive film in aqueous solution that coats and protects the skin while helping to soothe itch and abate scratching.[13,17]

Warnings/prescribing information

- Store below 30°C (room temperature).

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