- 1. Pistis M, Melis M, (2010) From surface to nuclear receptors: the endocannabinoid family extends its assets. *Current Medicinal Chemistry* **17**(14):1450-67
- 2. Cerrato S, et al (2010) Effects of palmitoylethanolamide on immunologically induced histamine, PGD2 and TNF release from canine skin mast cells. Veterinary Immunology and Immunopathology 133(1): 9-15
- 3. Abramo F, et al (2014) Increased levels of Palmitoylethanolamide and other lipid mediators and enhanced local mast cell proliferation in canine atopic dermatitis. BMC Veterinary Research 10(1):21
- 4. Kilaru A, et al (2007) The N-acylethanolamine-mediated regulatory pathway in plants. Chemistry and Biodiversity 4(8):1933-55
- 5. Kim M, et al (2010) Enhancement of wettability and dissolution properties of cilostazol using the supercritical antisolvent process: effect of various additives. Chemical and Pharmaceutical Bulletin (Tokyo) 58(2):230-3
- 6. Rasenack N, Müller B, (2004) Micron-size drug particles: common and novel micronization techniques. Pharmaceutical Development and Technology 9(1):1-13.
- 7. Cerrato S, et al (2012) Effects of palmitoylethanolamide on the cutaneous allergic inflammatory response in Ascaris hypersensitive Beagle dogs. Veterinary Journal 191(3):377-382
- 8. Waisglass S. (2012) Palmitoiletanolamide nella dermatite atopica canina: studio clinico in doppio cieco, randomizzato, controllato vs placebo. Proceedings SkinALIA 2012, Verona, Italy: pp 57-61

Each Redonyl Ultra cap contains	50 mg	150 mg
PEA-um	50 mg/cps	150 mg/cps
Essential Fatty Acid (GLA EPA and DHA)	25 mg/cps	75 mg/cps
Biotin	0.5 mg/cps	1.5 mg/cps

Redonyl® is a patented product of Innovet Italia

Dechra Veterinary Products A/S, Mekuvej 9, 7171 Uldum, Denmark
Dechra Veterinary Products A/S is a trading division of Dechra Pharmaceuticals PLC.
www.dechra.com





# REDONYL® ULTRA

DIETETIC COMPLEMENTARY
FEED FOR DOGS AND CATS
SUFFERING FROM DERMATOSIS



### REDONYL® ULTRA

Dietetic complementary feed for dogs and cats with high quality nutrients for support of skin function in the case of dermatosis and excessive loss of hair.

The carefully selected and delicately balanced ingredients play an important role in the physiology of the intact skin barrier. To avoid or respectively balance nutritional deficiencies and to support maintenance of healthy skin Redonyl Ultra contains a balanced combination of Palmitoylethanolamide (PEA), essential fatty acids and biotin.

- Essential Fatty Acids (GLA + EPA/DHA) are vital for skin barrier function and support the immune response in skin
- Biotin (Vitamin H) is important to the synthesis of fatty acids and support of optimal skin condition
- PEA-um (ultramicronized) soothes the skin and helps to maintain the physiological function of skin mast cell



**PEA (Palmitoylethanolamide)** is a naturally-occurring lipid compound, endogenously present in both animals and plants such as Soybean.

It (PEA) is an endogenous biomodulator locally produced "on demand" in response to tissue injury and stress<sup>1</sup>.

It can support the body's natural response to atopic dermatitis. It has been shown that PEA is able to down-modulate canine skin mast cell degranulation<sup>2</sup>, thus controlling the release of several biological mediators involved in itch and inflammation.

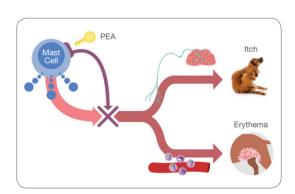
In the lesional skin of dogs with atopic dermatitis (AD), the endogenous level of PEA is 30-fold higher compared to normal canine skin<sup>3</sup>.

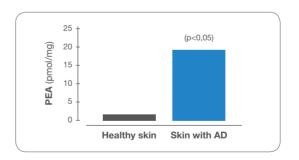
To reach the minimum effective dose is difficult to achieve with food consumption alone. Soybean is one of the natural food sources with the highest content of PEA (7µg per gram of fresh weight)<sup>4</sup>, however for a 5 kilogram dog or cat, more than a 3.5 kg daily supply of soybean would be necessary in order to get a dose of 5 mg/kg/day PEA.

#### **PEA-um (ultramicronized)**

Developed through a patented technology process called 'jet milling', PEA-UM particles are much smaller than non-micronized PEA. The smaller particle size helps to improve its solubility and efficacy.<sup>5,6</sup>













Micronized 96% < 10 um



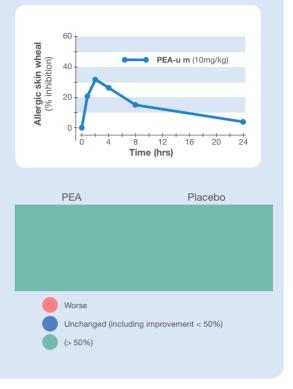
Ultra micronized 99.9% < 6 um

# **Demostrated Efficacy: PEA-um in** canine atopic dermatitis

- 1.PEA reduces allergic wheal in hypersensitive dogs7 In a canine model of allergic dermatitis (spontaneous Ascaris suum hypersensitivity) a single oral dose of PEA-um, given before repeated antigen intradermal injections (at 1, 2, 4, 8, 24 hours) significantly reduces skin wheal area.
- 2.PEA supports the skin condition of dogs with atopic dermatitis.8 A double-blind placebo-controlled clinical trial, performed in 20 client-owned dogs exhibiting clinical signs according to the standard diagnostic criteria for canine atopic dermatitis.



10/18 dogs on PEA treatment (55,6%) exhibited a CADESI score reduction more than 50%, compared to only 2/18 dogs on placebo (11,1%).



#### **Optimised dosing**

Redonyl Ultra is formulated in skittle caps with two different concentrations:



50 mg/cps (60 caps) for cats and dogs up to 12 kg



150 mg/cps (60 caps) for dogs more than 12 kg

The product should be administered in 60 day cycles at the daily doses shown in the table below. It can be used as part of a holistic approach to support the skin function.

Body Weight (kg)	Redonyl Ultra 50mg	Redonyl Ultra 150mg
0-6	1 caps/day	-
7-12	2 caps/day	-
13-19	-	1 caps/day
20-35	-	2 caps/day
>35	-	3 caps/day

## **Feeding instructions:**

Open the skittle capsules as shown in the drawing:

- · Squeeze the contents into the animal's mouth or mix them with a food ration
- Alternatively, the capsules can be swallowed whole.



