




ITCHY, IRRITATED SKIN...
HOW CAN I HELP MY PET
STOP SCRATCHING?

Contact us:

ROYAL CANIN UK
Lynx industrial Estate
25 Brympton Way
Yeovil BA 20 2JB
Phone: + 019 35 600 800
e-mail: royalcaninuk@royalcanin.co.uk



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WALTHAM®



Editorial

Skin is the body's largest organ. It acts as a true physical, chemical, thermal, mechanical and microbiological barrier between animals and their environment. It reacts to heat, cold, touch, pressure and pain and, together with hair, represents 12% of an adult animal's weight⁽¹⁾.

Skin is constantly being renewed and reflects both the pet's health and the quality of its diet. This is why you should regularly check the condition of your pet's skin and coat.

Skin conditions, expressed by itchiness, hair loss, infections (pyodermas), scaling, scabs or red patches, are very common. In dogs, they account for 25% of veterinary consultations. These conditions have many possible causes; they may be localised or may reflect general dysfunctions such as allergies or metabolic disorders. Having your pet examined by a vet is therefore essential to establishing a diagnosis and instigating the most appropriate treatment.

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What does skin do?

Skin quality (and therefore coat quality) is a well-known indicator of an animal's health and diet.

Skin has many functions:

- It protects the body against environmental insults, including allergenic compounds.
- Its flexibility and elasticity allow animals to move.
- It produces hair, vibrissae ('whiskers') and claws.
- It regulates the animal's temperature via the coat, skin vascularisation and sweating.
- It is a sensory organ that allows the animal to feel heat, cold and pain.

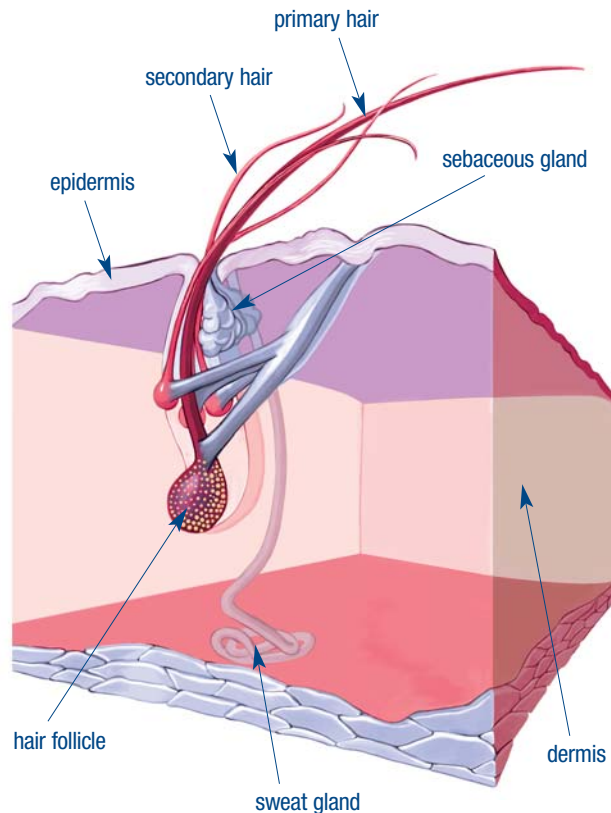


Diagram of the skin and hair

How can I look after my pet's skin and coat?

By regularly and carefully checking your pet's skin and coat, you will often notice changes that were not immediately apparent.

For example, you might notice dandruff, a splinter, or a mass (lump) that only recently appeared... Similarly, your pet's behaviour can be very significant: if he/she keeps scratching or licking, it is important to check affected areas closely. Do not hesitate to contact your vet if you are unsure.

The level of care your pet's skin needs depends on several factors, such as:

- species: cats are often more difficult to handle than dogs
- lifestyle: does he/she mainly live indoors or outdoors?
- coat type: long or short hair? Rough or silky?
- skin type: oily, dry or normal?
- ...



*Breton Spaniel
Photo Psaila*

Generally speaking:

- Check your dog after walks for splinters or grass seeds and remove any ticks or fleas you come across.
- Dry your dog if he/she is wet (with a clean bath towel), without forgetting his/her ears.
- Regularly groom your pet with a suitable brush or comb. This untangles any knots that may have formed and also removes dead hairs.
- Only wash your pet with shampoos specifically designed for cats and dogs. Companion animals have more acidic skin than humans, so human shampoos may irritate your pet's skin. If the shampoo you use was prescribed by your vet as part of your pet's skin treatment, make sure you follow recommendations regarding contact time and frequency of application for this local treatment to be fully effective.

3

Why is my pet scratching?

Animals may express itchiness by simply scratching themselves with their back feet, but also by nibbling particular body areas, rubbing or rolling on the floor.



Shar Pei
Photo COGIS

There are many different reasons why animals scratch.

- The leading cause is **contact with fleas**: when they bite, fleas secrete irritating saliva that causes itchiness.

In animals suffering from a 'flea bite allergy', a few bites are enough for the animal to scratch frenetically. However, fleas cannot always be seen on the animal, since their small size (a few millimeters at most) means that they hide between hairs.

How do I know if my pet has fleas?

The most common indicator of fleas is finding flea droppings (small black flecks) on the animal. Droplets of water will become reddish when mixed with these droppings.

Therefore, regular flea treatment of pets and their environment (including other animals) is advisable in all animals, and essential in all allergic pets.

Other less common causes of pruritus (itching) in cats and dogs include:

- **other parasites** (lice, harvest mites, cheyletiella...). It should be pointed out that sarcoptic mange (transmissible to humans) is very uncommon.
- **skin infections**
- **canine atopic dermatitis**
- **dietary allergies/intolerances**
- ...

The large number of reasons why pets can be itchy implies that many different treatments are possible. Your vet will carry out any additional investigations required for him/her to reach a diagnosis, which is essential to prescribing the right treatment.

My vet has diagnosed atopy: what does this mean?



Shar Pei - Photo COGIS

Atopy, also known as canine atopic dermatitis, is an allergy to environmental allergens, such as pollens, mites or moulds. It is believed to affect approximately 10 % of dogs⁽¹⁾ but remains difficult to diagnose.

The first symptoms of atopy appear in dogs aged from 6 months to 3 years (e.g. red patches, itchiness, regular ear infections, secondary infections) and may be more or less marked at certain times of the year

Some breeds are predisposed to atopy, such as West Highland White Terriers, Labradors, Shar Peis, Poodles, or Dalmatians, ...

Although the precise way in which allergens operate at skin level remains poorly explained, it has recently been demonstrated that atopic dogs have a deficient skin barrier, arising from alterations in the fatty layers (lamellae) between skin cells⁽²⁾.

Once this diagnosis has been reached, treatment aims to control atopy and ensure the animal has a good quality of life, free from itching and secondary infections. Because atopy is an allergy, it is a lifelong condition.

Therapy rests upon the combination of several treatments, including:

- **removing the allergen** (if it has been identified) from the animal's environment. In practice, this is difficult to carry out
- **immunotherapy** (desensitisation): this implies that the allergen has been identified
- **anti-inflammatories:**
 - **Steroids:** they are very effective, but not without side-effects with long-term use
 - **EPA / DHA:** these Omega 3 fatty acids, which certain fish naturally contain in large quantities, significantly improve symptoms in atopic dogs⁽³⁻⁴⁾
 - **Cyclosporin**
- **anti-infectious agents** to treat the secondary infections (bacteria or yeasts) that commonly occur
- **antihistamines ...**

5

How could diet help my dog's atopy or skin disease?



West Highland White Terrier
Photo Hermeline-COGIS

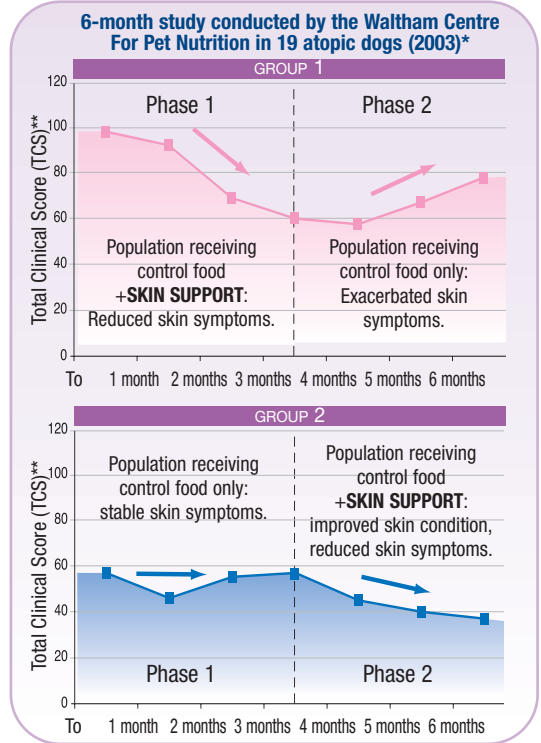
As explained above, atopy is a complex condition which requires combination therapy. Recent studies have demonstrated that specific nutrients are beneficial in the management of atopy, while being free of side-effects:

Borage flower
Photo: C. Chataignier



- EPA / DHA: the efficacy of oral supplementation with Omega-3 fatty acids, which are found in large quantities in fish oil, has been demonstrated in atopic dogs⁽³⁻⁴⁾.
- Borage oil: this oil is highly concentrated in gamma-linolenic acid and, in combination with fish oils, helps to improve the symptoms of atopy⁽⁴⁾.

- A combination of turmeric, aloe vera, taurine and vitamin C (such as the patented SKIN SUPPORT formula) helps to significantly reduce the clinical score of atopic dogs⁽⁹⁾:



* The dogs were divided into two groups, which alternately received the control food alone and the control food + Skin Support.
** TCS: Score taking into account 4 criteria (red patches, thickened skin, erosions, hair loss).

Incorporating these natural nutrients into a balanced diet also helps to ensure atopic dogs' daily nutritional requirements are met.

Royal Canin has drawn upon the latest scientific knowledge on nutrition, offering **AFFECTED DOGS** the most advanced nutritional response to **ATOPY** in its range: **SKIN SUPPORT**.

SKIN SUPPORT SS 23



1 Packaging



Available in 2.5, 4.5 and 10 kg bags.

Recommendations for use

Turmeric, one of the ingredients in Skin Support, is a natural yellow pigment which may stain hands or clothing upon direct contact. You are therefore advised to use a measuring cup when handling your pet's food, and to wash your hands if contact with the product has occurred.

The high fatty acid concentrations in Skin Support make it sensitive to oxidation.

So as to ensure its nutritional qualities are optimally preserved, Royal Canin uses controlled atmosphere packaging. It is also recommended to use a bag size which corresponds to the animal's weight to avoid the bag being open for too long.

2 Feeding Guides

Please refer to page 25.

3 Characteristics



Synergistic action of the patented complex[®] (turmeric, aloe vera, vitamin C and taurine):

- improves the skin's natural defences⁽⁷⁾
- promotes healing⁽⁷⁾.



Turmeric has been used for centuries both as a medicinal plant and a spice. Its healing^{®-9)}, antibacterial, anti-inflammatory⁽¹⁰⁾, anti-cancerous⁽¹¹⁾ and antioxidant properties are the subject of regular investigations and publications.



Skin Support contains the **highest EPA and DHA levels** (long chain omega 3 fatty acids) in the Royal Canin range.

It also contains borage oil, to fight against skin dryness.



Its patented vitamin complex⁽¹²⁾ (Calcium pantothenate, Inositol, Niacin, Choline, Histidine) **improves skin's barrier function and keeps it moisturised.**



Synergic patented formula⁽¹³⁾ of antioxidants (Vitamins E and C, taurine and luteine) **reduce oxidative stress and fights free radicals.**

4 Key Values

Proteins:	23%
Fat:	15%
Carbohydrate:	39.1%
Dietary fibre:	7.1%
Crude fibre:	4.6%
Minéraux :	7.8%
Metabolisable energy (C)*:	3 934 Kcal/kg
Omega 6:	2.3%
Omega 3:	2.5%
EPA+DHA:	1.84%
Linoleic acid:	2.1%
Calcium:	1%
Phosphorus:	0.8%
Sodium:	0.4%

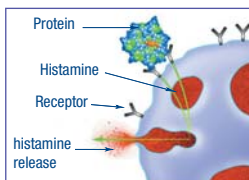
* according to ATWATER's equation

My vet suspects a food allergy: what does this mean?

Food allergies are caused by dietary allergens encountered during feeding. Animal proteins (beef, chicken...) are most commonly involved.

Mechanisms behind allergies

During the 'sensitisation' period (which may last several months, sometimes years), the animal is in contact with the allergen but does not show any symptoms. During this phase, however, he/she develops antibodies to the dietary allergen. In cases of allergic reactions, these antibodies recognise the allergen, leading to histamine release, which is responsible for the clinical signs.



Action of allergenic proteins

Signs presented by affected animals may vary from case to case: some animals present digestive symptoms (e.g. chronic diarrhoea, regular vomiting, flatulence), others will simply show skin symptoms (e.g. pruritus, regular ear infections, skin inflammation) while a proportion of affected animals will display a combination of digestive and skin symptoms. This is why this condition, which is actually fairly uncommon, often takes time and diligence to be diagnosed.

Your vet may suggest an “exclusion diet” to be able to accurately diagnose that your pet is allergic to a dietary protein. This involves your animal being **exclusively** fed a diet known to be hypoallergenic, for approximately 2 months. If your pet is allergic, his/her symptoms will improve during the test, and he/she will have to be fed a hypoallergenic diet for life.



Somalian
Photo Renner

Dietary treatment

aims to eliminate all contact between your cat or dog's body and the proteins to which he/she is allergic.

There are two types of **hypoallergenic diets**. They contain:

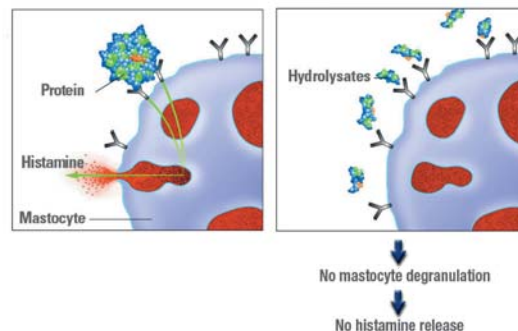
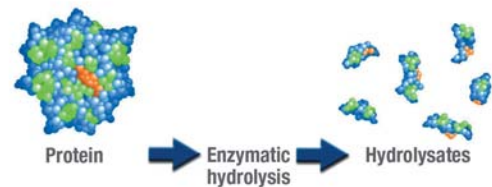
- either **Selected proteins**. In this case, the animal should be exclusively fed one type of protein (combined with one type of carbohydrate) that he/she has never been in contact with. This type of diet may be home-made. In this case, it is essential for owners to seek veterinary advice to ensure that the diet has the right protein, vitamin and mineral balance. This approach requires the owner to be highly committed to preparing meals and to have sufficient storage space available.

This is why it is most often replaced by industrial diets, such as Royal Canin **SENSITIVITY CONTROL**.

- or **Hydrolysed proteins**. These are proteins that have been broken down into little sections, called polypeptides or hydrolysates. These peptides are so small that they are no longer recognised as allergens by immune cells, and therefore do not trigger allergic reactions.

Royal Canin **HYPOALLERGENIC** diet was developed using this principle.

Hydrolysed proteins action



Advice for owners

- It is essential that you only feed your pet the prescribed diet (no table scraps or treats), or its beneficial effects will be cancelled out.
- Tell your friends and family about your pet's allergy and about the need to comply with the exclusion diet.
- Ensure stringent compliance with the parasite control programme (fleas and ticks) prescribed by your vet.

SENSITIVITY CONTROL



Management of dietary allergies / intolerances in cats and dogs.

SELECTED PROTEINS

1 Characteristics



Capelin and tapioca reduce the risk of allergic reactions to proteins and carbohydrate because they are not commonly used in cat and dog diets.



Patented formula⁽¹²⁾ of vitamins (Inositol, Pantothenate, Niacin, Choline, Histidine) strengthens the barrier effect of the skin and maintains hydration.



Eicosapentaenoic and docosahexaenoic omega 3 fatty acids (EPA and DHA), naturally present in high concentrations in capelin, regulate skin reactions and are involved in maintaining a healthy intestinal lining.



The addition of Fructo-Oligo-Saccharides (FOS) promotes a balanced digestive flora and maintains a healthy intestinal lining. This diet does not contain wheat gluten.

2 Additional urinary benefit for cats



The S/O approach guarantees that this diet will promote a urinary environment unfavourable to development of both struvite and oxalate crystals.



Struvite crystals



Oxalate crystals

3 Key Values for kibbles

	CAT	DOG
Proteins:	31%	24%
Fat:	11%	9%
Carbohydrate:	31%	35.4%
Dietary fibre:	12%	14.6%
Crude fibre:	6.4%	7.5%
Minerals:	8.0%	9%
Metabolisable energy*:	3 694 Kcal/kg	3 470 Kcal/kg
Omega 6:	2.3%	1.7%
Omega 3:	1.3%	1.1%
EPA+DHA:	0.9%	0.7%
Linoleic acid:	2.3 %	1.6%
Calcium:	1%	1.3%
Phosphorus:	0.9%	0.9%
Sodium:	0.6%	0.36%

* according to ATWATER's equation

4 Packaging

CAT

actual size

DOG

actual size

Available in 400 g, 1.5 and 3.5 kg bags, and in pouches (chicken and rice, duck and rice) and in alutrays (chicken and rice)

Available in 1.5, 6 and 14 kg bags, and in 420 g cans (chicken and rice, duck and rice)

5 Feeding Guides

Please refer to pages 24 and 25.

HYPOALLERGENIC



Management of allergies / dietary intolerances in cats and dogs.

HYDROLYSED PROTEINS

1 Characteristics



Soy protein isolate digest, which is composed of low molecular weight peptides, is highly digestible and of very low allergenicity.



Patented formula⁽¹⁾ of vitamins (Inositol, Pantothenate, Niacin, Choline, Histidine) strengthens the barrier effect of the skin and maintains hydration.



Eicosapentaenoic and docosahexaenoic omega 3 fatty acids (EPA and DHA), naturally present in high concentrations in fish oil, regulate skin reactions and are involved in maintaining a healthy intestinal lining.



Fermentable fibre (beet pulp, Fructo-Oligo-Saccharides) promotes a balanced digestive flora and maintains a healthy intestinal lining.

2 Additional urinary benefit for cats



The S/O approach guarantees that this diet will promote a urinary environment unfavourable to development of both struvite and oxalate crystals.



Struvite crystals



Oxalate crystals

3 Key Values

	CAT	DOG
Proteins:	25.5%	21%
Fat:	20%	19%
Carbohydrate:	33.3%	37.6%
Dietary fibre:	8.0%	5.4%
Crude fibre:	4.6%	2.2%
Minerals:	6.2%	8%
Metabolisable energy*:	4288 Kcal/kg	4 182 Kcal/kg
Omega 6:	4.65%	4.4%
Omega 3:	0.82%	0.8%
EPA+DHA:	0.32%	0.33%
Linoleic acid:	4.5%	4.3%
Calcium:	0.8%	1%
Phosphorus:	0.7%	0.8%
Sodium:	0.5%	0.4%

* according to ATWATER's equation

4 Packaging

CAT



Available in
500 g
2.5
and 4.5 kg
bags

DOG



Available in
2, 7
and 14 kg
bags

5 Feeding Guides

Please refer to pages 24 and 25.

7

Daily recommended amounts

1 - FOR THE CAT

SENSITIVITY CONTROL



DRY

Cat's weight	Kibbles					
	thin		normal		overweight	
	grammes	cups	grammes	cups	grammes	cups
2 kg	40	4/8	30	3/8		
3 kg	60	6/8	45	5/8		
4 kg	80	1	60	6/8		
5 kg	100	1 2/8	80	1	65	7/8
6 kg	120	1 4/8	95	1 2/8	75	1
8 kg			125	1 5/8	100	1 2/8

WET

Cat's weight	Pouches		Alutrays
	CHICKEN WITH RICE (Chicken and Rice)	DUCK WITH RICE (Duck and Rice)	CHICKEN WITH RICE (Chicken and Rice)
	pouches	pouches	Alutrays
2 kg	1 2/8	1	1
3 kg	1 6/8	1 4/8	1 4/8
4 kg	2 2/8	2	2
5 kg	2 6/8	2 4/8	2 4/8
6 kg	3 4/8	3 2/8	3
8 kg	4 4/8	4 2/8	4

HYPO-ALLERGENIC



DRY

Cat's weight	Kibbles					
	thin		normal		overweight	
	grammes	cups	grammes	cups	grammes	cups
2 kg	35	3/8	25	2/8		
3 kg	50	4/8	40	3/8		
4 kg	70	5/8	55	4/8		
5 kg	85	7/8	65	5/8	55	4/8
6 kg	105	1	80	6/8	65	5/8
8 kg			105	1	90	7/8

Comment: 1 cup = 240 cm³

2 - FOR THE DOG

SKIN SUPPORT



DRY

Dog's weight	Kibbles					
	thin		normal		overweight	
	grammes	cups	grammes	cups	grammes	cups
2 kg	70	5/8	60	4/8	45	3/8
4 kg	120	1 1/8	95	7/8	70	5/8
6 kg	160	1 3/8	130	1 1/8	95	7/8
8 kg	200	1 5/8	160	1 3/8	120	1 1/8
10 kg	235	2 1/8	190	1 5/8	140	1 2/8
15 kg	315	2 6/8	250	2 2/8	190	1 5/8
20 kg	390	3 4/8	310	2 6/8	235	2 1/8
30 kg	525	4 5/8	420	3 6/8	315	2 6/8
40 kg	645	5 6/8	515	4 5/8	385	3 3/8

SENSITIVITY CONTROL



DRY

Dog's weight	Kibbles					
	thin		normal		overweight	
	grammes	cups	grammes	cups	grammes	cups
2 kg	80	1	65	6/8	50	5/8
4 kg	135	1 5/8	110	1 3/8	80	1
6 kg	180	2 2/8	145	1 6/8	110	1 3/8
8 kg	225	2 6/8	180	2 2/8	135	1 5/8
10 kg	265	3 2/8	210	2 5/8	160	2
15 kg	355	4 3/8	285	3 4/8	210	2 5/8
20 kg	435	5 3/8	350	4 3/8	260	3 2/8
30 kg	585	7 2/8	470	5 7/8	350	4 3/8
40 kg	725	9	580	7 2/8	435	5 3/8

WET

Dog's weight	Cans	
	CHICKEN WITH RICE (Chicken and Rice)	DUCK WITH RICE (Duck and Rice)
	cans	cans
2 kg	4/8	4/8
5 kg	6/8	6/8
10 kg	1 2/8	1 2/8
15 kg	1 6/8	1 6/8
20 kg	2 2/8	2
30 kg	3	2 6/8
40 kg	3 6/8	3 2/8

HYPO-ALLERGENIC



DRY

Dog's weight	Kibbles					
	thin		normal		overweight	
	grammes	cups	grammes	cups	grammes	cups
2 kg	65	5/8	50	4/8	40	4/8
4 kg	110	1 2/8	85	1	65	6/8
6 kg	145	1 5/8	115	1 3/8	90	1
8 kg	180	2 1/8	145	1 5/8	110	1 2/8
10 kg	210	2 3/8	170	2	125	1 4/8
15 kg	285	3 2/8	230	2 5/8	170	2
20 kg	350	4	280	3 2/8	210	2 3/8
30 kg	470	5 4/8	380	4 3/8	285	3 2/8
40 kg	585	6 6/8	465	5 3/8	350	4

Acute moist pyoderma:	skin infection.
Allergenic substances: (or allergens)	particles (pollen, mites, food proteins...) that can trigger an allergy in a sensitive subject.
Allergy:	aggressive immunity response by the organism to an allergenic substance (allergen).
Aloe vera:	a plant originating from Africa, known since the times of Ancient Egypt for its modulating effects on inflammation, and for its antioxidant and healing powers.
Anti-histamine:	substance that acts against the release of histamine by the mast cells, thus reducing allergy symptoms.
Atopy: (Canine Atopic Dermatitis)	environmental allergy to pollen or mites, mold...
Capelin:	ocean fish, rich in Omega 3 fatty acids.
Cheyletiella:	parasitic mite on the skin, responsible for itching and developing dandruff.
Chigger or Harvest mite:	red colored mite, present in lawns and grass, frequently encountered at harvest time.
Corticoids:	very powerful anti inflammatory medicines, part of the cortisone family.
Cyclosporine:	an immunomodulating molecule used to treat atopic dermatitis in dogs.
Dermatitis:	inflammation of the epidermis.
Food intolerance:	an undesirable but not immunity related, reaction by the body to ingestion of a food.
FOS (Fructo-Oligo-Saccharides):	fermentable fibers that promote a positive development of the intestinal flora.
Histamine:	substance contained in the mast cells and released when the animal encounters an element to which it is allergic. The widespread release of this molecule is at the origin of allergy symptoms.
Histidine:	amino acid used in the synthesis of proteins.
Immunotherapy:	reducing the animal's sensitivity.
Inositol:	vitamin B7 active on the skin and coat.
Mast cell:	immune cell that contains histamine. The mast cell releases histamine during an allergic reaction.
Niacin:	group B vitamin active on the skin and coat.
Pantothenic acid:	vitamin B5, plays a key role in cellular metabolism.
Polytherapy:	therapy based on the combination of several forms of treatment.
Tapioca:	source of de carbohydrates (manioc).

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