

Food-Related Skin Conditions In Dogs

Skin-related problems are often the **first visible sign of an animal's adverse reaction to a food** or food component, but do not necessarily indicate an "allergy". A variety of non-dietary factors such as viral infections, genetic conditions, and simple old age can also produce skin and coat complaints, as well as environmental conditions such as temperature and sunlight. Despite this, it is **generally accepted that the incidence and diagnosis of food-related skin conditions is increasing**, and the development and growth of **hypoallergenic** and veterinary diets are testament to this.

Principally, **three main causes** of food-related skin reactions can be identified: - **nutrient imbalances, food intolerances, and hyper-sensitivities**. In all cases the reactions are not controlled by the body's immune system, but by other complex chemical reactions. In the case of hyper-sensitivities **skin irritation** and **inflammation** are commonly caused by circulating chemicals known as **series-1 eicosanoids**. These compounds are by-products from the **body's metabolism of omega-6 fatty acids**, such as linoleic acid, which are found in **vegetable oils and chicken fat**. A surplus of these fats in the diet causes an increase in these eicosanoids in the blood, which in turn can put the body in a "**state of alert**", causing it to react in a disproportionate way to small disturbances caused by the diet.

To counter this effect omega-3 oils, e.g. from fish, can return the body back into balance producing **anti-inflammatory** series-3 & 5 eicosanoids. In addition, since the metabolic pathways for the production of both groups of compounds are identical, the **ratio between omega-6 and 3 in the diet is the critical measurement**. Ideally this should be between 5:1 and 10:1 (omega-6:3), although many standard, commercial diets are often closer to 20 or even 30:1. **Feeding a high quality fish-based food, or supplementing with a small quantity of pure fish oil, is the most effective way of achieving this ratio.**

FEED FISH ... AND SEE THE DIFFERENCE!