

## Using Saliva to Detect Food Sensitivity and Intolerance in Dogs to Gluten And Other Food Ingredients

**Summary:** Surveys of purebred dog clubs have identified food sensitivity or intolerance as a common health concern. Other than time-consuming feeding trials, which eliminate potential reactive ingredients every several weeks, testing for this condition has used expensive and unsightly skin patch testing or screening of serum samples that often lacks specificity. An accurate and efficient canine food sensitivity and intolerance test can help owners recognize the symptoms and take the right steps to treat and alleviate this problem by using individualized case-specific nutrition.

**Body:** Delayed food sensitivities are common and can be manifested by gastrointestinal, neurological, pulmonary, dermatologic, ear, nose and throat, musculoskeletal, genitourinary, cardiovascular and endocrine problems. Although people are often unaware of the distinction, sensitivity and intolerance to foods is not synonymous with a food allergy.

Previous clinical experience with identifying delayed food sensitivity depended upon measuring the offending antibodies in serum. These tests were mostly based on IgG or IgE antibody measurements. However, although these serum-based assays had high sensitivity, they demonstrated relatively poor specificity for an individual patient.

Today, new studies have revealed that delayed food sensitivity is more accurately identified by measuring food associated IgA or IgM antibodies in saliva. In fact, antibodies to food ingredients can appear in the saliva before the clinical or gastrointestinal biopsy diagnosis of inflammatory bowel disease or "leaky gut syndrome" is made. Saliva testing can thus reveal the latent or pre-clinical form of food sensitivity. A similar elaboration of IgA or IgM antibodies in saliva rather than serum pertains to animals with latent or pre-clinical gastrointestinal and /or dermatological diseases.

Delayed food sensitivities are usually revealed as soon as 2 hours or as long as 72 hours after eating, which explains why it can be difficult to connect the symptoms with a food or foods eaten as long as several days previously.

A practical and rapid screening of saliva for food sensitivity and intolerance provides an opportunity to enhance the health of animals. Food antigens in the gut have been shown to lead to the early production of IgA or IgM antibodies in saliva. In some cases, IgA or IgM antibodies to food ingredients appear in saliva that are not even present in serum.

In contrast to food allergies, food sensitivity and intolerance is a response to a particular food, or compound found in a range of foods. Intolerance can result from the absence of specific chemicals or enzymes needed to digest a food substance. It may also result from an abnormality in the ability to absorb nutrients, and gastrointestinal reactions can be due to malabsorption or other abnormalities.

Symptoms of food intolerance can include skin rashes, dermatitis, eczema, mouth ulcers, abdominal cramp, nausea, gas, intermittent diarrhea, constipation, irritable bowel syndrome,

and inflammatory bowel disease.

Food sensitivity or intolerance is more chronic, and less obvious in its presentation.

An assay to determine whether your dog has a sensitivity or intolerance to a food ingredient is revolutionary, not only because it has never been done before in animals, but the technology is based on testing your dog's saliva. It is easy to get a saliva sample and obtain the assay results, so that the diet can be modified promptly, if necessary. The first six ingredients being tested are gluten containing products such as corn, wheat, soy, and also beef, eggs or dairy ingredients. Another 14 ingredients will make up the expanded test panel in future.

Until now, time-consuming dietary elimination trials were performed where one ingredient at a time is removed and the remaining diet is fed for six to eight weeks to determine if the patient's food-related symptoms subside. With the new saliva based diagnostic test for identifying these reactant foods, such elimination trials may become a thing of the past.

**Resource Box:**

Hemopet offers the most advanced [canine food intolerance testing](http://www.hemopet.org/services.html), patented technology. This service offered by the company benefits dogs with [canine food intolerance](http://www.hemopet.org) such as food sensitivity To learn more about the company's Nutriscan testing services and obtain the test kit, visit Hemopet.org or call 714-891-2022.