



## Purine analysis in dog food

A balanced diet is enormously important for a dog's health and well-being. Low-purine feeding is increasingly becoming the focus of attention. The reason for this is that not all dogs are able to completely break down purines. This can result in serious health problems.

### WHAT ARE PURINES?

Purines are organic compounds and, in the form of the purine bases adenine and guanine, are important building blocks of DNA. Purines are contained in every cell nucleus. The more cells a feed contains, the higher the purine content. In particular, feeds of animal origin (e.g. skin and offal), which are frequently used in pet food for dogs, are rich in purines.

### WHEN SHOULD DOGS BE FED A LOW-PURINE DIET?

There are various reasons for a low-purine diet for dogs. However, it is particularly important for dogs suffering from leishmaniasis (as a result of medication to control the disease) and for dogs with a specific genetic defect. In both cases, purines or their metabolic products cannot be completely broken down by the organism.

This leads to increased levels of xanthine and uric acid in the blood, which in turn is the prerequisite for increased formation of kidney stones. The result is often cystitis or even kidney damage. In such cases, a low-purine diet becomes necessary for the dogs, as this allows the concentration of the critical metabolic products to be reduced in a natural way.

### AGROLAB IS YOUR COMPETENT ANALYTICAL PARTNER FOR PET FOOD

Our specialised laboratory AGROLAB LUFA GmbH offers you **accredited analysis** of purines. With our purine package we cover all relevant purines as well as their metabolites.

Purine bases and their metabolic or degradation products:



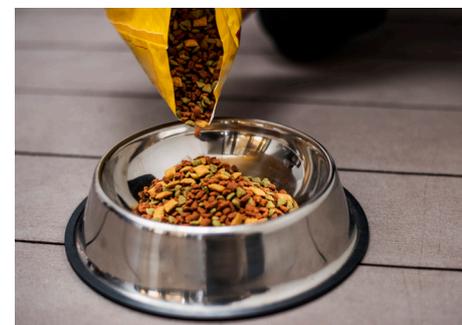
### Examples of purine-rich and low-purine feed agents (-materials) Rich in purines

#### Rich in purines

- Offal
- Skin and connective tissue
- Dried chews (e.g. ears)
- Fish
- Legumes

#### Low in purines

- Dairy products
- Rice
- Noodles
- Vegetables
- pure muscle meat (compared to offal)



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## YOUR PLUS: OUR KNOW-HOW

We also calculate the purine nitrogen content for you and from this the corresponding amount of uric acid equivalents. The uric acid equivalent describes the amount of uric acid that can be formed from the purines contained (incl. metabolic products).

An excessive uric acid concentration is one of the main reasons for the possible formation of kidney stones. Therefore, we recommend the values of the uric acid equivalents as a basis for evaluating the purine content of your dog food.

## WE ANALYSE FOR YOU

As a specialised laboratory in the field of pet food, we support you with our analytics from the raw material to the end product:

- Complete feed (dry and wet feed)
- Supplementary feed (snack products, chewing articles, etc.)
- Animal, vegetable and mineral raw materials (=individual feed)
- Premixes (e.g. mineral and vitamin premixes)
- BARF products
- etc.

## OUR SERVICE

### PERSONAL AND COMPETENT SERVICE



Your regional contact person in the field will be happy to answer all your questions about prices and services. Your responsible account manager at the laboratory location will support you at any time with all questions regarding your order.



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### LOGISTICS



- AGROLAB supports you in sample logistics, e.g. with robust reusable shipping boxes made of plastic or polystyrene (with cooling elements) and sampling material.
- Stress-free, punctual parcel delivery through E-way courier order according to your requirements.

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