

CANINE NUTRITION - COST vs. QUALITY

The consumer is getting an ever increasing number of food qualities. How to choose the right and best food for ones dog at the affordable expense ? This is the question presented to us almost daily. It is no surprise when we look at the number of different qualities being offered for our dogs. Each producer claiming to have the best rawmaterials and the best manufacturing processes. There are many high quality foods and there are many low quality foods. The trick is to be able to analyse and separate them from each other. Two major areas are needed to differentiate, quality and cost. In this article we try to clarify this misty and confusing area and give the readers few hints how to navigate through the myriad of offerings and to separate the good from the bad.

We need to understand what the dog needs and hopefully this article will give the reader some answers.

What should I need to know about the right nutrition to my dog ?

- Proper nutrition is important to your dogs health.
- Proper nutrition is not only important to your dogs daily nutrition, but it is imperative in recuperation from different illnesses or injuries.
- In knowing the basic requirements on nutrition, you can be assured of feeding the pets correctly for long and healthy life.

Your dogs nutrition must contain water + 5 nutritional groups.

Water:	Water is the most important single nutritional element.
Protein: (tiles, boards)	Proteins are the building blocks of the body. The blocks are called amino-acids, of which the body uses for maintenance and building itself..
Carbohydrates: (conveyer belts)	These are the starting fluids for energy and the conveyor belts for transporting the nutrition and sugarchains.
Fat and oil: (elctricity, heating oil)	Fats give energy. Fat is also needed for utilization of fatsoluble vitamins. Oils are important sources of unsaturated fats, the sources for good skin and shiny coats.
Minerals: (plaster, glue)	Minerals have important control functions. Makrominerals (Calsium, phosphorus, magnesium, potassium and soda) are the largest group. Mikrominerals (iron, zinc, copper, manganese and selenium) are very important in controlling bodily functions and keeping it alive.
Vitamins: (bosses telling each ingredient to do its job)	The main functions are to control bodily functions. Vitamins are divided into two groups.; Fatsolubles (A,D,E, and K) and watersolubles Thiamine, riboflavin,niasine, pantrothenic acid, folic acid, B6 and B12 vitamins).

If one of the ingredients is not in balance with the others, they are all imbalanced !!

DRY DOGFOODS

In comparing dry dogfoods, there is certain number of information that must be written on the bag. By reading the ingredients panel, analysis and feeding instructions, one can make fairly good judgements of the real food quality.

There are two separations that are worthwhile to make, separate the foods by cost and quality. In separating the foods from one another, find out the daily costs. This is very simple to do, provided the manufacturer or distributor will give you the information. (If they do not, you can take it that this producer is trying to hide something and that alone is good enough reason to avoid their product.) You need to know the metabolised energy (ME). This is the amount of energy that the dog can utilize from the food. You can also get an indication of this by comparing the suggested feeding amounts per day. The higher the digestibility, the lower the feeding cost.

Divide the daily suggested feeding amounts for your dogsweight, with the weight of bag. This will give you the information how many days will that bag last. (the dog eats what's inside, not the bag.)

Divide the cost of the bag with the days. This will give you the daily feeding costs.

Example: 30 kg dog, purchasing 15 kg bag, feeding amounts and costs per day.

	Cost of bag	Feeding amount/day	Bag lasts	Cost per day
Quality A	€70	270 g	55 days	€1,27
Quality B	€60	350 g	42 days	€1,42
Quality C	€50	450 g	33 days	€1,51
Quality D	€40	550 g	27 days	€1,48

In this comparison, the most expensive is actually the cheapest

You probably have more questions than answers by now. How can this be? Why? Let us try to lead you through the reasons.

REAL QUALITY

We all want the best for our dogs. We also want to save where we can. This is where most of the mistakes are made, when food is chosen. Most of us will buy the cheapest or almost the cheapest bag of food, believing the advertising and trusting the food quality. Still, we see the dog itching, having no luster on its coat, loose bowels, etc. All these can be corrected with high quality dogfood, at no real extra cost. The simplest comparison is, if consumption of food is high, it is of lower quality.

The basis for selection of optimum food for our individual dog, is to understand its metabolism. Metabolism is a complicated process, of which our researchers and scientists are finding out more almost daily. The balance of all nutrients is one of the most important criterias. No single food item, be it protein, fat, vitamins or mineral, works alone. To find the proper balance between the nutrients is the key.

A fairly good analysis can be made from the ingredient label alone. Most of the information is there in front of our eyes. If we only know how to read the label, we can make intelligent decisions.

HOW MANY AND WHAT TYPE OF PROTEINS ?

The dogs are omnivores and they can best utilize meats for their protein needs. Vegetables must be precooked to be of any use, but still their biological availability remains less than 50 % of meat. Offcourse they are much cheaper than meats, the main reason so much is used in the industry. Meats are expensive, but much easier for dogs to convert into amino-acids, so the main sources for protein should be meats. How many meats the food contains is also very important. If the food contains poultry (chicken), meat (pork/beef/lamb), and fish, these three will give the dog an excellent multiple source of proteins. Added with dried egg, now we have a very wide range of nutrition based proteins available for the dog.

In reaching for a good quality, the ingredient panel must start with meat. If the ingredient panel starts with meat , we are on the right track. If it starts with vegetable, not so good. Why ? The regulations dictate that the ingredients must be listed by quantity. The dogfood contains most of the material listed first, in this case vegetable. In very simple terms, if food starts with vegetable, you do not need to go any further.

Note of warning on the protein/fat contents. Do not get stuck on the values. These are only indications of what the food contains. These have nothing to do with the real nutrition, as these are technical values and there is no guarantee what the dog can digest.

Example: Protein 35 %, Fat 25 %

We can make a legal products like this backed by independent laboratory analysis, off rawmaterials like:

- 1 Feather pillow
- 1 Old leather shoe
- 1 Liter of used motoroil
- 1 kg Sawdust

A dog cannot utilize any of this material, but legally it fills the technical values for labelling !!

The reason for this example is to warn every consumer from staring at the these values. Follow your dog how it does with a chosen food. It will tell you if the food is better than the one you had before.

FATS

Fat is the real energy source for the dog. Animal fats contain saturated and unsaturated fats. These are easily digestible and good energy sources. In the broader sense, chicken fat is of higher quality, as they contain more unsaturated fats and these effect the skin and coat. Animal fats like pork, contain saturated fats which are good energy sources. Salmon contain a high number of unsaturated fats (omega-3/DHA/EPA) and are excellent sources for good skin condition. All are needed.

Vegetable oils, like soyaoil, cornoil, lecitin, sesamseedoil and wheatgermoil contain unsaturated fats (omega-6) which are essential for good coat. The best result is achieved when animal and vegetable oils are all present in best possible balance from best possible sources in balance which each other. Too much of one will create problems, balance is everything. (see our article conserning Omega's)

Energy values

Energy value is calculated as grossenergy. This will tell you how much energy the food contains. Next information needed is digestibility, i.e. how much of this grossenergy the dog can utilize. This is the metabolized energy (ME). This is what you are paying for and is imperative to know. If the manufacturer refuses to give this information, that alone is an indication of them wanting to hide something. Usually this is informed in percentages, how many percent of the grossenergy is digestible.

Example:				
<u>Total energy kJ/100 g</u>		<u>Digestibility</u>		<u>Metabolized Energy</u>
1968 kJ/100 g	x	90 %	=	1787 kJ/100 g
1920 kJ/100 g	x	85 %	=	1632 kJ/100 g
2050 kJ/100 g	x	80 %	=	1640 kJ/100 g
1890 kJ/100 g	x	80 %	=	1512 kJ/100 g

This comparison tells you what you are paying for to get energy into your dog. The total energy level will fool you to believe in high energy availability, but the opposite may be true. If you can find out these values, you can calculate the real annual expenses, and most people are shocked when they find out how much the real differences are in monetary terms.

VITAMINS AND MINERALS

These are of extreme importance. All vitamins and minerals are consumed jointly. Never stare at one value. In high quality food, the vitamins and minerals are well balanced. You do not need to add any. The A-vitamin level will also give you an indication of quality. Low levels mean low natural resistance against diseases, high levels mean high natural resistance, just like in humans. Very often an itchy skin can be cured by just feeding a food with higher vitamin and mineral contents.

NUTRITIONAL VALUE

This is the most important and most difficult to determine. This is what you are paying for, but do you really get nutrition or something that may fill the dogs stomach, but gives very little nutrition. The easiest indicator is the amount of feces. A lot means low utilization, little means good utilization.

The basic listing needs to start from the ingredient panel. Here are five hints for a quick look on the quality:

- Ingredients** - **Ingredient panel starts with meat, not vegetables.**
- Digestibility** - **How much can the dog utilize**
- Energy** - **Energy values**
- Suggested feeding amounts** - **How much consumed per day**
- A-vitamin** - **Gives you an indication of vitamin and mineral contents**

You need to find at least 1 meat, preferably three, to guarantee a wide proteinrawmaterial base for your dogs needs.

These findings will give you a simple checklist, if the food contains any of your dogs basic nutritional needs. You can now choose different foods, irrespective of what the advertising or nice picture on the bag tells you. By selecting few foods, let your dog tell you. You will see the difference after abt. 60 days, the time it takes for the dog to replace its cells. Negative effects can be seen sooner.

ADDITIONAL SUPPLEMENTS

Many high quality producers supplement their product. By supplementing we mean additional nutrients not found in other raw materials normally used for food. Following are considered extremely important. Although costly, these are available in some high quality products and these are the extra reasons to use high quality dog food. If you can find these in the ingredient panel, you are on the right track.

- Coat and skin conditioner** Salmon and Linseed, high in Omega-3's/DHA/EPA, together with other fats and oils helps to create a new bloom and shine to the coat.
- Seaweed (kelp)** Natural source of minerals aiding in coat growth and fertility.
- Pre- and Probiotics** Beta glucans, mono-oligosaccharides, inulin, Live microorganism (Lactobacillus acidophilus, Streptococcus faecium, enzymes etc.) enhance digestibility, providing a stable stomach environment, reduce gas and stress-related diarrhea and vomiting.

IMBALANCE OF MINERALS

In high quality industrial dog foods, no additions of vitamins or minerals are required. All additions are discouraged, as these would more likely cause more harm than good. Balance is everything.

In low quality foods, additions are necessary, but on high quality products additions could cause following:

- Too much calcium: Increased growth -> bone growth problems
 Reduction in zinc digestion -> skin and coat problems
- Too much zinc: Reduction in copper digestion -> Lowers immunisation and natural resistance

These are just a few examples of excesses resulting in a chain reaction type problems.

Hopefully this article sheds some light to the myriad of advertising practises by the manufacturers. The consumer is getting more knowledgeable everyday and this leads to better nutrition and through this, to healthier pets.

Our Golden Eagle Petfoods exceed all existing feeds and is the first nutrigenomic foodline in the world. It specifically addresses different areas of metabolism and is the only feed in the world containing a mix of nutraceuticals, BioHealth™, MicroHealth™ and LactoHealth™ and we recommend you to let your dog to convince you if we don't.

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