

Is Your dog alright - A survey on dog nutrition

Marjut Nieminen, Natural Animaltherapy School Weter, Oulu, Finland

I opened a dog guidance centre in the Natural Therapy Centre "Apila" in summer 1994. During the following couple of years I developed the idea of doing research on how people feed their dogs, and on the connection between diet and ailments in dogs. Nutrition is a factor which inevitably influences a dog's health. In the last ten years, a great change has occurred in the way people feed their dogs: manufactured food has become the main source of nutrition for dogs. As a consequence, the daily additive intake has increased while fresh, unprocessed food has been nearly or totally excluded from dogs' diets.

Through 1996 I conducted an inquiry about dogs' ailments and eating habits. I chose retrievers as a target group. Questionnaires were distributed on a random basis among dog owners in dog shows, other dog events and in one issue of Curly-Coated Retriever review. I received information on 79 different aged dogs. The owners of these dogs answered the inquiries about their pets' health and eating habits with the knowledge of a layman, i.e. without any medical competence. Each dog's condition and the influences of nutrition on his health were evaluated in the dog's home environment instead of by laboratory observation. I think this gives us a realistic idea of the health problems of each individual. I truly hope that dogs will benefit from the findings of this survey, and that these findings will help dog owners to evaluate, observe and treat illnesses and ailments possibly caused by an imbalanced or inadequate nutritional composition rather than by mere genetic weakening of health. Table 1 shows the distribution of breeds in the study population.



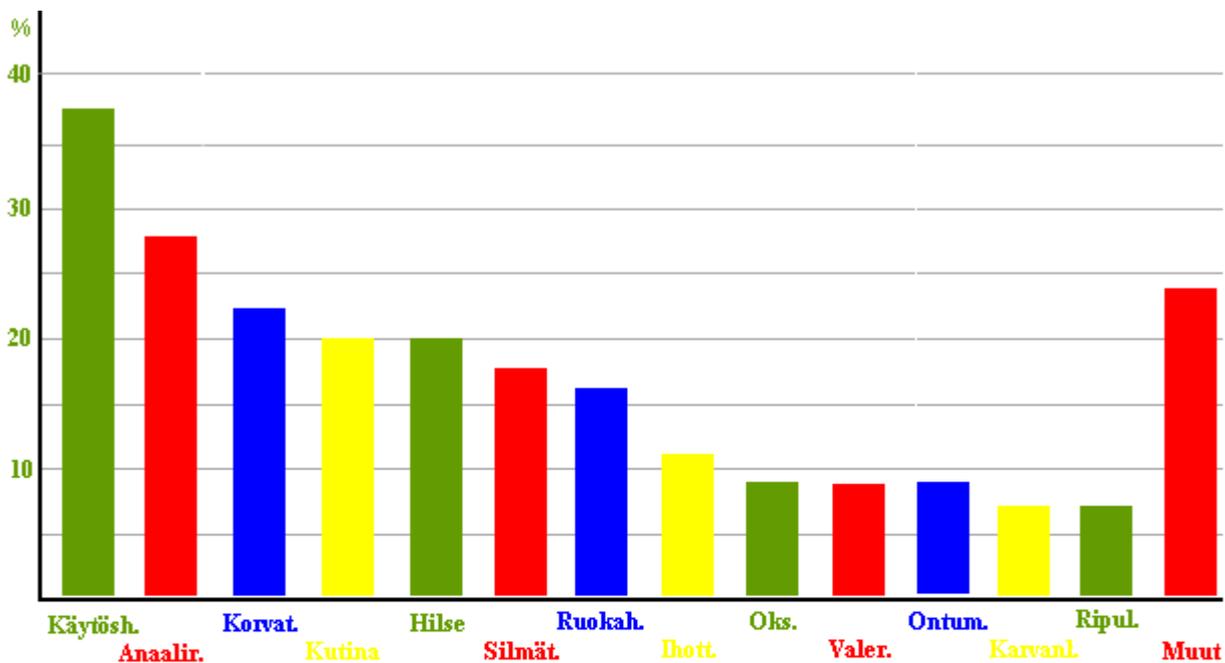
Table 1. Percentual distribution of breeds within study population (Flat-coated Retriever 10%, Labrador Retriever 15%, Golden Retriever 23%, Curly-Coated Retriever 52%).

The most common ailments in dogs

Various chronic ailments were reported in 45 dogs, i.e. in 57% of the study population. Most of these dogs suffered from more than one condition.

The results of the survey show that dogs most commonly suffer from diverse behavioral disturbances. In all, 38% of the dogs had behavioral problems. The owners reported oversexedness, hyperactivity, stress intolerance, maladjustment, poor concentration, aggression, apathy, depression, timidity, stool eating.

The second most common of the recurring ailments seemed to be anal gland problems (27%). Of the subjects, 22% had ear infections, 20% suffered from itching and 20% had dandruff. Eye infections were reported in 18% of the dogs, 16% lacked appetite and 11% suffered from skin rash. Vomiting, limping and false pregnancies were each reported in 9% of the study population. Hair loss and recurrent diarrhea were each reported in 7%. Heart disease was reported in 4% of the dogs, and also 4% had epilepsy. As 'other problems' the owners reported e.g. dry coat, cough, lack of mass, hypothyroidism, prostate isorders and monorchidism.



Lyhenteiden selitykset:

Käytösh. = käytöshäiriöt	Anaali = anaalirauhasvaivat	Korva = korvatulehdukset	Kutina = kutina	Hilse = hilseily	Silmä = silmätulehdukset
Ruokah. = ruokahalutomuus	Ihott. = ihottumat	Oks. = oksentelu	Valer. = valeraskaudet	Ontum. = ontuminen	Karvanl = karvanläntö

Table 2. The most common ailments in dogs. Key: Käytösh. = behavioral disturbances, Anaalir. = anal gland problems, Korvat. = ear infections, Kutina = itching, Hilse = dandruff, Silmät. = eye infections, Ruokah. = lack of appetite, Ihott. = skin rashes, Oks. = vomiting, Valer. = false pregnancies, Ontum. = limping, Karvanl. = hair loss, Ripul. = diarrhea, Muut = other problems.

Various behavioral disturbances were the biggest problem, and next came anal gland disorders. The next question is, what is the common factor of these two ailments occurring in the opposite ends of a dog? Behavioral problems are often linked with problems in the urogenital area, which leads to e.g. oversexed behavior, territorial urinating, itchy areas around the anus, the tail and the anal glands. An explanation for these co-occurring symptoms - behavioral disturbances and problems in the anal area - can be found in neurology and cell metabolism. It is commonly known that dogs express their emotions with their tails. The limbic area of the brain regulating emotional life is connected to the pelvic area - i.e. the bottom of the tail, the rectum, the urinary bladder and the genitalia - with the tenth cerebral nerve, the Vagus nerve (H. E. Evans, 1993). The brain also communicates directly with different cells. Various additives and heavy metals disturb the functions of the nervous system and the cell metabolism. Therefore, is it possible that a dog strained with additives develops behavioral problems and/or anal gland disorders?

Hippocrate, the Father of Medicine, said that we are what we eat. Nutrition is the foundation of our health. Incorrect diet may even cause illness. Researches have shown that especially the additives in our food cause more symptoms or make the symptoms worse although they do not directly cause allergy. Some additives cause urticaria (hives), redness of the skin and swelling (angioedema). Angioedema is a form of urticaria in which the swollen area of the skin is visibly larger and deeper. Moreover, artificial colors and additives have been noticed to increase learning difficulties and behavioral problems in children, such as edginess, impulsiveness, nervousness, sleeping problems, short attention span, asociality and even aggression (Lähteenmäki, Nuutinen & Parkkinen, 1996).

Problem-causing foodstuffs

In the questionnaire dog owners were asked to tick the foodstuffs that cause problems to their dogs or to which their dogs are allergic. The most common source of ailments or allergies seemed to be commercial food, dry food, which caused complaints to 31% of the dogs. The second worst group was dairy products (18%), among which milk was regarded the worst. Dog's sausages caused ailments in 15% of the dogs. Canned food and wheat each caused ailments in 13% of the subjects, whereas in 11% eating fish caused problems. Corn was a source of troubles in 6% of the dogs, and beef, lamb, pork and chicken each caused problems in 4% of the study population. Rice and soy products also caused symptoms in 4% of the dogs, and barley, rye, millet and buckwheat were problem-causing grains in 2%. Oats caused no ailments to any dog of the study population.

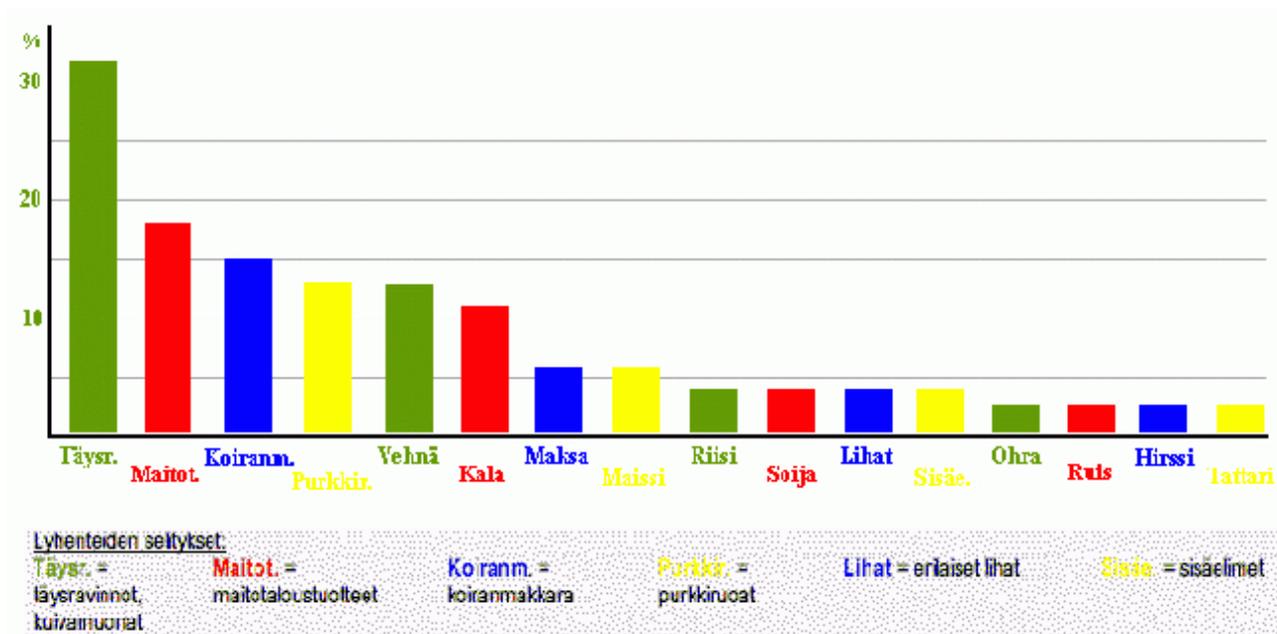


Table 3. Problem-causing foodstuffs. Key: Täysr.= dry food, Maitot. = dairy products, Koirann. = dog's sausages, Purkkir. = canned food, Vehnä = wheat, Kala = fish, Maksa = liver, Maissi = corn, Riisi = rice, Soija = soya, Lihat = various meats, Sisäe. = tripe, Ohra = barley, ruis = rye, Hirssi = millet, Tattari = buckwheat

This survey showed that manufactured dry food is the main cause of ailments for dogs. Additives are widely used during manufacture, but the total amount of additives in commercial food depends on the type of soil and the land of origin of the raw material. Dogs get additives from other sources as well: vaccines and medicines in which the adjuvant usually is aluminium hydroxide. Adjuvants can cause local skin irritation in the site of injection or even lead to formation of an abscess (Pearson, Dhein & Gorham, 1986).

Signs of aluminium toxicity were first noticed in the 1940s when it was stated that aluminium administered in injections causes malfunctions of the nervous system and damages the CNS of animals (Kuosmanen, 1991). Vaccinations are, however, mandatory for any dog participating dog shows, competitions or other dog events. This is why dog owners should pay attention to the daily nutrition of their dogs in order to decrease the additive intake. The most sensible solution to the problem is to feed the dog with food containing as little additives as possible. The results of this survey indicate that additives cause similar symptoms to dogs as they do to children, namely behavioral disturbances. If such symptoms persist in a dog for a long period of time, they may become somatic and lead to a physical illness, e.g. anal gland disorders or ear infections. Ear infections were the third most common ailment in the study population. Practitioners of traditional natural therapies are aware of the fact that ailments in paired organs are connected to emotional disturbances and difficulties in making social contacts. The above mentioned symptoms may result from problems in the cell metabolism of the brain, caused by additives.

Among the actual foodstuffs, milk and wheat were the main causes of ailments. During the last ten years, lactose intolerance has become more and more common among human beings, too. In my experience, people who react to pasteurized and homogenized milk have no problems whatsoever with unprocessed, fresh milk. The same could be true for dogs, too. Dogs generally tolerate soured milk products well.

Many dogs have problems with wheat. Wild canines do not often eat cooked carbohydrates. As the use of processed dry food increases, dogs develop an intolerance towards wheat - manufactured food is mainly wheat. Corn is also used in dry foods. Again, this survey shows that corn is the second most common problem-causing grain. Because of the intolerances provoked by these two grains, the manufacturers started to produce rice-based dog foods. Rice was considered a neutral grain which causes no allergies. However, nowadays there are dogs that are allergic to rice, too. Carbohydrates constitute a major part of the dry foods. The nutritional composition of dry food is opposite to what wild canines, e.g. the wolf and the fox eat in nature (Siivonen, Pulliainen, Lampio, 1972). This leads us to the conclusion that also high amounts of carbohydrates probably cause ailments in dogs.

The possibility of developing food allergies increases when the mucous membrane of the intestines has been damaged by various infections, medications, additives or incorrect nutrition. In such cases the normal bacterial flora of the intestines has changed. The nutritives are absorbed into the blood flow in too large molecules. The body starts producing antibodies, and allergy test results are positive. In the treatment of such conditions, we should concentrate on the bowel flora, the mucous membranes, the entire digestive tract and the absorption of nutritives, rather than simply eliminate the foodstuff from the diet - the selection of permitted foods may become very narrow, even absurdly so. If the nutritive absorption has been poor for a long time, the dog often needs additional fatty acids, vitamins or minerals to restore the balance in his system.

The dogs' favourite food

In the questionnaire there was a question about the dogs' favorite food, and the owners answered this question freely. The most frequent answer was rather vague and yet very informative: 'everything'. In more detail, the owners first reported meat, then home-made food in general, offal, bread, fish, porridge and meat mixture, and cheese. Some dogs even liked fruit. Three dogs out of 79 preferred processed dry food.

Raw food as part of the dog's diet

According to the owners, most dogs prefer meat. The questionnaire included a question on the amount of raw animal products and raw animal fats the owners feed their dogs. How common is it

to feed dogs raw animal products and raw, unprocessed animal fat? And how do the dogs react to such raw food?

The question 'How often do you feed your dog raw meat, offal or other raw food of animal origin?' was answered as follows: Of the dogs, 17% were fed raw food daily, 23% were given raw food 2 to 4 times a week, and 60% occasionally or never. One owner was unable to give the information.



Table 4. Dogs who were fed raw meat, offal, etc. Occasionally/never 60%, 2-4 times/week 23%, daily 17%.

It is often recommended that owners add vegetable oil to their dogs' meal, and these oils are widely used with reference to the fact that they are beneficial to humans. However, canines are supposed to feed on animal products, and therefore fresh, unheated animal fats are an important source of nourishment for canines.

The question 'How often do you feed your dog raw, unheated animal fat (lard, pork fat, butter, fish fat)?' was answered as follows: 8% of the dogs were given raw, unheated animal fat on a daily basis, 16% had such fats 2 to 4 times a week, and 57% occasionally or never. Owners of fifteen dogs (19%) gave no information on this matter.

We can, however, presume that more dogs receive raw fats in the form of so-called hidden fats, if they are usually fed raw meat or other raw food, but then the amount of fat in the nutrition seems to be not very high (Table 4.).

Influence of raw food on dogs' health

The dog owners in the study population had changed their dogs' diets because the dogs were not feeling well. The dogs had had various ailments as presented above (Table 2). The changes included adding raw animal products to the dog's meals, i.e. in addition to either processed dry food or home-made food.

The owners responded freely to the question about the observations they had made in their dogs after raw food had been included in the diet. The most visible effect of the change in diet was improvement in the dogs' coat and skin, and five owners claimed that their dogs' skin rash had disappeared when they started feeding the dogs raw animal fats. The amount of feces had decreased, and the stools were darker in colour than before. Bowel movements had improved, diarrhea was less common and some dogs had got rid of anal gland troubles. Moreover, the dogs seemed to need less food than before. Eating more raw food, the dogs had a better appetite, they gained in mass and weight, and one owner wrote that their old dog had recovered its previously lost muscles. In stressful situations, the great demand for energy was met with animal fat instead of vegetable fat.

Owners also mentioned that in dogs that were given raw food, growth was steady, resistance was better and the dog became livelier. A few owners wrote about the changes they had noticed in their dogs' behavior. They said their dogs were calmer and more cheerful. Aggressive and oversexed behavior had become less common.

In the survey, a few dogs seemed to react negatively to meats and offal. In my experience, an animal product (e.g. meat) that causes ailments in a dog when processed or cooked, does not cause any troubles in its original, raw form.

Nutrition is the foundation of good health in humans as well as in dogs. Today, dogs mainly feed on processed dry foods which contain various amounts of additives and large amounts of carbohydrates. A dog who feeds merely on dry food does not receive unheated fats and nutritives. He gets no enzyme and bacterial digestion-improving substances. Most dogs do not get the typical nutrition of canines. According to this survey, 60% of the dogs were practically never given raw food. Raw food is important for us humans, too, in order for us to maintain our health. For humans, the raw nutrition is composed of fruit, berries and vegetables, whereas canines' raw food derives naturally from other animals. In this survey, the 31 dog owners who regularly (daily or 2 to 4 times per week) fed their dogs raw animal fats, meat, offal or other raw animal products, clearly witnessed positive changes in their dogs' health - even the disappearance of ailments - due to the added raw food. This finding encourages an even more thorough study of nutrition that influences dogs' health.

Sources of information on feeding dogs

Table 5 shows where the owners in the study population had got instructions and advices on feeding their dogs.

The questionnaire included a question on the nutrition of puppies at the breeder's. Only two breeders answered this question. The questionnaire was not answered by many breeders. The survey shows that 75% of the dog owners had received feeding instructions from the breeder. The breeders are the most important instructors on this matter. This has also been noticed by many dog food salesmen.

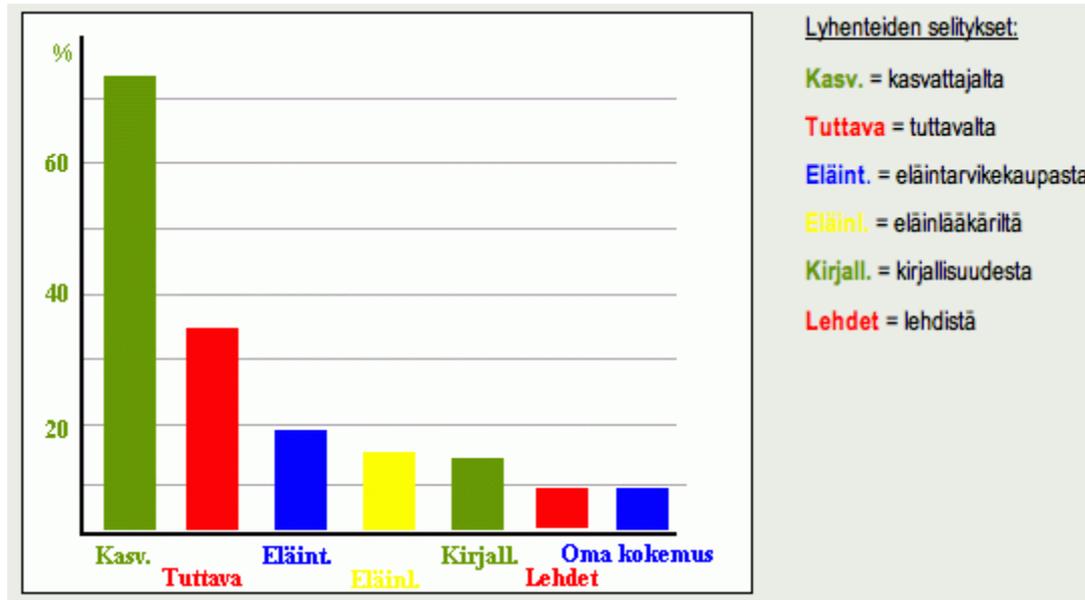


Table 5. Sources of information on feeding dogs. Key: Kasv. = from the breeder, Tuttava = from a friend or an acquaintance, Eläint. = from a pet shop, Eläinl. = from a veterinarian, Kirjall. = from literature, Lehdet = from magazines or reviews, Oma kokemus = own experience.

References

- H E Evans: Miller's Anatomy of the Dog, 1993
- Lähteenmäki, Nuutinen & Parkkinen: Ravintomme lisäaineet, 1996
- Pearson R C, Dhein C R & Gorham J R: Vaccines and principles of immunization, Veterinary Clinics of North America: Small Animal Practice- Vol. 16, No. 6, 1986
- Siivonen, Pulliainen, Lampio: Koiraeläimet, teoksessa Siivonen: Suomen nisäkkäät 2, 1972
- Kuosmanen T: Alumiini - uusi uhka ympäristölle ja terveydelle. Terveys, No.7, 1991