

## Feed what I need!

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The origin of kibble dates back to the year 1860 when Mr Spratt walks in a harbour and sees a dog eating sea biscuits that the sailors have dropped. In Holland before WW2, it was quite normal to buy raw meat for your dogs and cats.

The promotion and selling of kibble really took off after the Second World War. There were large stocks of grains and food that had gone bad, and instead of paying for the disposal of these stocks, some companies figured they could make money by selling it as kibble. Today it's a 50 billion dollar market (39 billion euros), and still growing fast (100 billion by 2017!). Companies including Nestlé, Procter & Gamble (Eukanuba), Mars (Pedigree, Royal Canin) and Colgate (Palmolive, Hill's) are all very big companies that spend huge amounts on advertising and marketing.

### What is Kibble made of?

We have to understand what is in the different products before we understand what our dog really needs.

Basically kibble is made of:

- Cereals, grains, wheat, soybeans, corn (cellulose, carbohydrates)
- Animal by-products including category 3 (hoofs, horns, brains, chicken legs and heads, udders, deceased animals, tumours, faeces). This is worse in the United States than in Europe, because pets and livestock that have been put to sleep by the vet are included, which means that our dogs also get the medicines from those carcasses. It is also known that traces of flea collars have been found in dog food.
- Plant by-products (organic waste, sawdust, peanut shells, beet pulp)
- Preservatives like BHA, BHT Ethoxyquine (agricultural poison and insecticide) — this is used to keep the grease inside the kibble from spoiling.
- Up to 25% (!) sugar and 1000 times more salt than is naturally present in the ingredients (taste), and dogs are not made to cope with lots of salt.
- Leftover grease and oil, restaurant grease, boiled fat (leftover products of meat and bone meal). Restaurant grease is a market of its own. Restaurants actually get money for their leftover grease!

### Must the producers of pet food name all the ingredients on the package?

The answer is no, because technically by law, if you make a *base product* including bone meal and flesh meal, its contents are not required to be listed on the package. Only what is added AFTER preparation of the base product must be listed. Many of these “base dough’s” are produced in China and India, and made on prescription by the buyer, which means they decide up front what will be added without having to list that on their wrappings. When advertising about dog food, presenters wear white coats to look like scientists, and on the package it's all about percentages (percentage protein, fat, fibre) but nobody is talking about the *food*. It might as well be protein from leather derived from shoe and coat production. The fat can be restaurant grease, and the fibre can be sawdust and peanut shells. On paper it all looks like the correct ingredients for our food. But we cannot call it food. There are actually some producers that investigate how poor the food can be without excessive muscle loss. That is why, when you change a dog from kibble to raw food, it develops muscle. Many dogs never have a choice; they get fed kibble 365 days a year. We also eat bad food, but we do get variety. However, if we only eat junk food 365 days a year, we will have health problems. If fries and burgers are left untouched for one year, there may not be a touch of mould on them, as some photographs have shown. Even the flies don't touch it! To be honest, real food doesn't behave that way. Kibble has a recommended shelf life of up to 18 months; some brands even a little longer. If there is real nutrition inside, what is keeping it from spoiling?

### How old could a dog get?

Some studies show that properly cared for and fed, a dog has the physical potential to live well beyond 20 years. The oldest recorded dog was a 30-year-old Dachshund. A 29-year-old terrier is still alive, as is a 27-year-old crossbreed. This begs the question, is it normal for a dog to die at the age of 14?

### **What should they eat?**

First of all, let's look at what they need. Humans are herbivores; we have natural enzymes in our mouths with which we can break down cellulose. The dog doesn't have that because he is not an herbivore. Furthermore, the dog's stomach is only a pouch for keeping the food. Interestingly in the dog, the caecum is very small. The function of the caecum is to remove moisture and breakdown salt. By comparison, the human caecum is very long. It is much more capable of processing salt than the dog's. Also the large intestine of the dog is very short compared to that of the human. Its function in the dog is to remove the remaining moisture from the faeces; and that is its only function. Our large intestine is very long because it has to do a lot more. Our teeth are also different. The dog has teeth designed for the tearing of flesh. These are all clear signs that the dog is a carnivore.

### Main carnivore facts

The stomach acid of a dog has a pH value of less than 1. In an all-meat and bone diet there is no survival of *E. coli*, salmonella, *Campylobacter*, trichina worms, parasites, etc. A dog fed kibble has a pH of around 5-7 and it takes about a week on raw food for the value to drop back down to 1. At pH 1 he can digest bones. Another side-effect is that I have never, ever, seen worms in a dog fed raw food, because the stomach acid is too hostile for parasites. It is always a question of symbiosis; in the intestines there are lots of little creatures that keep the system going, but that is only a problem when there is too much of one species. So there should be symbiosis; raw feeding ensures it. The dog is extremely efficient at breaking down meat and fat, especially the latter. It requires a large amount of uric acid. When I eat fat, I can start running, but to lose some of that I would have to run for a long time, because I am very bad at breaking down fat. When a dog starts running, he can instantly use his fat reserves as energy for the muscles.

### If a dog is a carnivore, why does he eat all sorts of things?

The key word is *survival*. A dog doesn't know when his next meal is going to appear. He doesn't have a refrigerator to take things out of when he's hungry. Instinctively, a dog eats when he can and what he can, just for survival.

### **So my dog really needs:**

Non-heated, non-processed meat/fat/bone. Heating denaturises proteins; in other words it changes the shape of the protein molecules. This is easy to see, for example, when boiling an egg. The substance is clearly changed. This can mean that the dog's immune system reacts to the odd shape of the protein and considers it an alien form. This could mean that some dogs have an immune system that is constantly battling at a low level against these alien proteins. So, for example, a dog may not be able to gain weight. It's important that when you feed your dog protein, the protein has its natural shape. And this means it has to be raw. The same is true of calcium. For example if you boil an egg, the shell is useless to your dog. But if you give him the shell raw, he will be able to assimilate the calcium.

If a dog kibble is going to have a shelf life of 18 months, then its contents have to be processed. The meat is often boiled down and turned into a powder before adding to the kibble.

### **What raw meaty bones contain**

This is very important stuff. This is what your dog really, really needs.

- There are almost no carbohydrates in meat. It contains protein, moisture,

- o methionine, vitamin B1, B6 and B12, iron, and zinc.
- o Fat in the meat contains omega 3 and 6, amino acids, fatty acids, and fat-soluble vitamins A, D, E and K.
- o And the bones contain calcium, phosphorus, copper, iron, all amino acids (except methionine), lysine, and vitamins A, D and E. Lysine is a very important element that controls, among other things, growth. Puppies that get enough lysine have no growth pains. It is a very important substance.

Many of the nutrients and vitamins need to be stored airtight for their survival (think of the vitamin C in an apple turning brown), which is the case in fat, meat, bone marrow. But within kibble it is impossible to preserve these nutrients and vitamins. Producers spray them over the kibble after baking, but because the kibble is always surrounded by air (also in the wrapping) these nutrients and vitamins break down very fast.

### **How much raw fat does a dog need in his diet?**

This is where we differ a lot from our canine friends. A dog needs around 30% raw fat. Also, when starting a dog on raw food, there is an almost immediate and very clear change in the skin and fur, which become shiny and soft. This is one of many signs that the dog is finally getting what he needs.

### **Is that like a "complete" meal?**

We are all used to the word "complete". When we give a dog the same kind of food day in, day out and year in, year out, the chances are that he will have shortages. There are basically three mechanisms for extracting nutrition from the intestines into the blood. These are *diffusion* (sodium-potassium pump - ion transport), *osmosis* (through membranes into the blood), and *active transport* (the cellular membrane folds around the desired materials outside the cell). For example, calcium and phosphorus share the same transport, but calcium has priority over phosphorus, so the transport only picks up calcium. This is called competitive inhibition. Therefore, it is very, very important to vary the diet to prevent this from happening.

### **Two ways of raw feeding**

We can feed bones and raw food (BARF), or raw frozen dog food. The latter is the same as the former, only minced. This has the advantage of being able to fit for example into a Kong. It has only one disadvantage, which is that the dogs do not get to chew. The eating experience is way too short, but using a Kong helps a bit. It also extends the pleasure, releasing endorphins.

Note;

When starting on the "whole bones with meat" version of raw feeding, it is very important to gradually build the eating skills of the dog, starting with "beginners" bones like for instance: chicken necks and chicken carcasses before moving on to turkey, rabbit, hare, lam, goat, and cow. So educate yourself before feeding raw bones! You can always safely start with feeding your dog "raw frozen" (minced) dog food, and expand the diet later on.

### **More is better**

The stomach of a dog has a highly convoluted lining. This allows a greater surface area (when expanding from the meal) for the enzymes to work on the food. This again extends and prolongs the eating experience, and causes better digestion and intake of nutrients.

### **Some benefits of raw feeding**

A happy, healthy and mentally satisfied dog

- o No more smelly fur, mouth, or ears (less toxins being excreted)
- o Much healthier and shiny coat
- o Way less faeces — the food is used better

- No more worms (on an exclusively raw diet)
- Cures many allergic reactions to grains, heated proteins and preservative toxins (BHA/BHT/Ethoxyquine), thyroid imbalance, autoimmune system failure
- Balanced (bone)growth from pup to adult dog (lysine)
- Good healthy appetite, no more weight problems despite quantity.

### **Is it okay to mix kibble with raw food?**

The answer is no, because dogs digest them at different rates. Raw food is digested in 8 to 10 hours, whereas kibble takes about 18 hours to leave the body. So feeding both of them together means that the raw food stays in the intestines too long and there is a chance of bloat.

Raw food causes amazing improvements in dogs. Within a few days they have better fur, stronger pigment, better teeth and more joy over their food. If you have never considered feeding your dog raw food, give it some thought and then give it a try!

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