

## FACT SHEET

### Naturediet And The Barf Diet

#### The theory

The theory behind the Biologically Appropriate Raw Food (BARF) diet is that your pet should be fed on raw meat and bones as their wild ancestors would have done. These diets tend to incorporate the feeding of raw chicken wings, necks or carcasses with bones. In addition the weekly feeding of fish is also recommended.

Raw diet proponents point to the wolf as a direct comparison.

Some, if not all, BARF users profess only the feeding of meat as dogs are considered to be carnivores. The reasons dogs were given such strong teeth and jaws is for killing and tearing apart their prey and their stomachs are capable of digesting raw bones. Excluded from the barf diet are any cereals as they believe that these products are directly responsible for many of the health problems we see today with our pets. Carbohydrates are not required by dogs.

The BARF diet advocates that by using this type of diet, there are significant benefits:

- Decreased dog odour
- Sweeter smelling breath
- Improved dental condition
- Decrease in the quantity of stools produced
- Reduced veterinary fees
- Improved stomach and bowel function
- Improved immune system
- Reduced allergies
- Improved muscle generation

For your pet to be healthy and remain healthy to an old age, the diet must be nutritionally balanced.

Vitamins are required for the correct bodily functions. Raw meat contains all the necessary vitamins for a healthy dog.

All living organisms contain enzymes; however, cooked or processed foods do not have these enzymes. Raw meat contains all of the enzymes required for the health and vitality of your dog.

#### The facts

##### Wolves

The domestic dog and the wolf, whilst related, are separated by several millennia of domestication. The wolf is actually an omnivore, and whilst meat does make up the majority of their diet, vegetation is regularly consumed, often directly from the stomach of their prey.

The general diet of a wolf is meat from prey animals; it may be fresh or not fresh. The wolf eats every edible part of the meat, skin, fur/feathers, fats, marrow, blood, organs and bone. The skin and fur of the prey animal, whilst not specifically nutritional acts as a buffer to protect the digestive system and bowel from any sharp objects like bone: however, this is not an infallible safety precaution and wolves and wild dogs can suffer from perforated bowels.

When meat is scarce wolves are also able to digest vegetables. Captive wolves are generally fed from animals killed on the road. However, they do not generally eat the meat until it has been buried to let it putrify. This process allows for some of the complex proteins to be broken down, which is beneficial to wolves as well as our pets.

At this stage it should be noted that in order for an animal to receive the required calories and nutrients as provided in a commercially manufactured food, you would have to feed them five times more meat than in the manufactured food.

#### Wild animals versus domesticated animals

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There are some obvious differences between wild and domesticated animals:

- Domestic dogs do not have the same digestive enzymes as a wild dog. Dogs have evolved over thousands of years during domestication. They have been in captivity for at least 2000 years and they have survived on food supplied by humans. Dogs today have been evolved by man. It is a well known fact that domesticated dogs live longer than a wild dog
- The BARF diet does not in fact represent what is fed in the wild to dogs or wolves. The only way to do this is to include such items as worms, roots and rodents in the diet
- BARF suggests that the diet is supplemented by dairy products. Dogs are lactose intolerant and do not produce lactase after 6-8 weeks of age, the enzyme critical for the breaking down of lactose. This of course does not include eggs which are not dairy products but in fact meats
- There are genetic differences between wolves and the domesticated dog. Their skull and teeth structure is completely different and the area around the ears is much wider. Wolves also mature physically at a different rate to the domestic dog

## Dogs

Many hundreds of years ago dogs were scavengers and predators. Over time canines and felines were used in the household, for example rodent control especially in the grain stores. The animals were rewarded by the humans for the task they had completed. Over time dogs and cats became dependant upon humans to provide food and shelter.

Even just before World War II, commercially produced pet foods were not available. Even if they were available, we would not have had the money to purchase them. Due to the damage caused during the war, they were hundreds of homes built to house the returning servicemen. In order to pay for the homes, more women went out to work. Thus the only food available to pets, were the leftovers from the tables of their owners. Of course at this time there was little knowledge available on pet nutrition and any details that were available were put onto labels in such a language that the normal every day person could not understand them.

In commercially produced pet foods, during this period, the primary meat used was horsemeat and it was soon discovered that many pets were allergic to the protein in horsemeat and developed serious allergies.

## Evolution

Pet owners decided to embark in the preparation of pet foods themselves. Especially as at that time, it was becoming obvious that the majority of commercially produced pet foods were causing considerable health problems with dogs, hence the propagation of raw food diets. Of course we never thought about the potential for Salmonella and other fatal organisms. Whilst the wild dog's stomach environment is acidic enough to kill such organisms, many domestic dogs fall ill to such infections. We have domesticated dogs and have allowed, by breeding, for dogs to be more used to human food than a raw diet as they would eat in the wild.

## Users of the BARF diet

If you search the internet, you will see a huge amount of information available on the BARF diet. The majority of the information is provided by dog owners and breeders, not from people who have pet nutrition expertise gained by a science background.

Analysis of statements made by BARF diet proponents:

- **Chicken and turkey bones are easily digestible.**  
[Many dogs have been injured or died through eating raw fowl bones.]
- **Bones won't splinter on a full stomach.**  
[Many jagged pieces of bone damage their throat.]
- **Cooking the meat destroys the quality of enzymes.**  
[Freezing degrades and destroys these enzymes also.]

Many BARF users are actually feeding by definition an 'uncooked diet' as 'raw' is defined as untreated and freezing is a treatment. Very few BARF users are able to source fresh raw food on a daily basis.

The benefit to dogs should be the food enzymes contained within the raw food. In the wild the mother eats the meat from a kill and

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regurgitates the kill or her pups, in effect she is serving pre-digested meat. In addition we should consider that raw meats are very high in fat. The feeding of raw meat has been shown to cause occurrences of pancreatitis in dogs. Not only is raw meat high in fat but digestion thereof promotes creation of enzymes. A high fat raw diet can kill.

- Freezing kills all parasites.  
[The freezing of meats does kill some parasites but not all and it does not kill bacteria: it purely slows them down. The most dangerous parasite in raw food is Toxoplasmosis.]
- Pasteurisation leads to arthritis.  
[The makers of raw meat diets often suggest a meal plan that contains dairy products. Dogs in the wild do not eat dairy. Dogs have a very low tolerance for dairy products. They do not produce lactase, the enzymes required for breaking down of lactose.]
- Dogs are carnivores.  
[Dogs are omnivores. They eat both meat and vegetation, although meat is the higher percentage. Cats are true carnivores. That doesn't mean that raw meat is perfect for them either.]
- Enzymes are required for a healthy diet.  
[Enzymes are required to aid digestion but is the level found in frozen meat adequate and viable?]

## Requirements of diet

Dogs are not total carnivores - as well as eating mainly animal derived food they also consume the gut contents, including faecal content, of the herbivores they prey on and supplement their diets with vegetation such as grasses and berries. Dogs are also scavengers by nature so would get a pretty varied diet living in their normal environment.

Even if the dog's owner were to struggle to maintain proper nutrition by adding vitamins, minerals and fresh vegetables in the correct balance, it would be a full time job.

There are specific requirements to maintain the healthy well-being of a dog listed below:

- Protein
- Natural anti-oxidants
- Vegetables
- Essential and non essential amino acids
- Fibre
- Ground natural bone
- Fats and oils
- Moisture

## Problems

A number of health issues have been raised about animals fed a BARF diet:

### Stomach and bowel problems

These can be seen in many forms and can be due to bones: choking, obstruction, perforation and impaction where bony material accumulates in the large bowel.

### Infection problems

Potentially pathogenic bacteria commonly associated with raw meat such as Salmonella or E. coli can cause serious infections. Even if a case is made that dogs can tolerate bacteria-rich food there are equally important concerns for the owners and their family. Unless scrupulous hygiene measures are maintained for the storage and preparation of these raw meats there are real risks of infection.

### Dietary imbalance

Owners who formulate their own BARF diet may fail to provide a balanced diet for their dog, giving rise to significant health problems. Despite the fact the purists would argue a properly prepared BARF diet will be balanced, many BARF feeders do supplement the diet with either dog food or add a mineral and vitamin supplement.

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## The research

Like humans, dogs are living longer by eating wholesome and well balanced diets, which contain the correct balance of vitamins and minerals.

Are we saying that the raw diet is best; does this also mean that humans should feed raw food as it contains the optimum level of digestive enzymes?

Why do we risk our pets and own health by feeding raw food? There are those who suggest that by blanching meat for a few seconds will render it safe. Although it can be said that this does kill some bacteria, there are other bacteria that will survive.

If you look at some of the information available with regard to the BARF diet, it promotes that a healthy dog can survive on 60-70% raw meaty bones. Does this mean that only healthy dogs can be fed the BARF diet?

## Preparation

Users of the BARF diet profess that the preparation of the raw diet only takes 10 minutes per day. If this is the case then they cannot be utilising all of the methods professed to be best for the BARF diet.

- Grains should be sprouted and pureed for increased digestibility. Sprouts have to be soaked for 12 hours and then they have to be left for 24-48 hours to sprout.
- How does the BARF user know the required amount of selenium? Grain sourced from different areas of the world can contain different levels of selenium. A high level of selenium is toxic to a dog.
- How does the BARF user know the proper amounts of phosphorous and the proper ratios to include. A dog that is fed meaty bones could be getting 10-20 times more phosphorous than calcium, which is far too much.
- Whole raw fish does contain calcium, but not the correct ratio of phosphorous to calcium. Raw fish also contains the enzyme Thiaminase, which destroys Thiamine. Numerous cases have been reported of sled dogs that have developed severe nervous system problems and experienced muscle weakness because of Thiamine deficiency.
- If a dog is fed fatty meat containing a small amount of protein, this will lack the essential amino acids it needs for growth and repair.
- Sprouted grains may be harmful if they contain tannins, which are well known to reduce the digestibility of proteins.
- We do agree that bones are essential to dogs as they are a good source of minerals. However, bones should be ground, if not they can cause stomach and digestive problems.

If we take all of the above into consideration, how can a BARF user prepare the food in a 10 minute period?

Of course, we must also be aware that raw meat kept in a fridge along with human food, can lead to bacteriological infections in the family. Unless of course you are able to provide a fridge especially for your dog!

## Why use Naturediet?

Naturediet has been manufacturing high quality pet foods for over thirty years. We pride ourselves in producing food for our pets which does not contain any of the following:

- Meat by-products
- Meat meal
- Digests
- Wheat
- Soya
- Peanut hulls
- Vegetable protein
- Corn
- Hydrolised meal
- Chemical anti-oxidants, which are known to be carcinogenic, such as: Ethoxyquin, BHA (Butylated Hydroxyanisole),

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- BHT (Butylated Hydroxyulene), Propyl Gallate
- Flavourings
- Colourings
- Fillers, binders and emulsifiers

Naturediet does contain:

### High Quality Meat

Premium quality meats such as chicken, lamb, and tripe provide high quality protein, with essential amino acids, vitamins and minerals.

### Protein

Proteins are used by the body for growth and repair of tissues and are therefore one of the most important nutrients in the diet. Proteins are compounds of carbon, hydrogen, oxygen, nitrogen, and sometimes sulphur and are made up of smaller sub units, or building blocks called amino acids. Some of the amino acids are essential to the body and others less essential if the body is able to produce it itself. All proteins have a biological value that depends upon the composition of its amino acids with each protein usually containing around 20 amino acids.

The digestibility of a protein is the extent to which it is able to be absorbed for use within the body. As certain foodstuffs are easier to digest than others it follows that different types of food provide better protein quality due to the amino acid composition, allowing digestion and therefore absorption to occur with greater ease.

### Natural antioxidants vitamins E and C.

These prevent rancidity in the food and also act as free radical scavengers in the body. Both are essential for the correct functioning of the immune system. Vitamin E is plant derived and therefore is not included in a BARF diet.

### Vegetables

Vegetables such as carrots are used to aid the cleansing of blood and formation of good tooth enamel and are also high in vitamin A which is a powerful natural antioxidant. Potatoes can give carbohydrate, phosphorous, potassium and iron, vitamins B6 and C.

### Essential and non essential amino acids

A food that contains all essential amino acids is said to be a food with high biological value. One amino acid worth mentioning at this point is Taurine; this is only present in meat.

### Carbohydrates

Carbohydrates are principally a form of both sugar and starch. All members of this group contain the compounds carbon, hydrogen and oxygen. Carbohydrate is the main source of energy in most dry diets and provides bulk to the diet. If unused by the body, carbohydrates can also be converted into body fat and stored within the body. As carbohydrate is not a large part of a dog and cats natural diet it is possible for both species to survive without carbohydrate, providing the diet contains sufficient energy.

### Fibre

Fibre is a form of complex carbohydrate which all dogs require a certain amount of in their diet. It provides the roughage or bulk in the diet, which is needed to help with the passage of food through the intestinal tract.

The level of fibre within the diet will determine the speed in which digested food passes through the intestine, the type of fibre together with the correct level will reduce the likelihood of constipation or diarrhoea. Its inclusion in the diet promotes the correct bacterial activity in the intestine, which in turn aids absorption of nutrients used within the body and results in improved intestinal health and faecal consistency.

### Whole grain brown rice

Whole grain brown rice provides carbohydrate, vitamin E and minerals. Whole grains contain natural amino acids, which give considerable health benefits. We do not use wheat, soya and barley, which often cause allergic reactions.

### Ground natural bone

Small amounts provide the calcium and phosphorous needed for strong healthy teeth and bones and help to promote the correct working of the digestive system

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## Fats and oils

Fats, as with carbohydrates, are compounds of carbon, hydrogen and oxygen. They consist of a combination of three fatty acids joined by a unit of glycerol. The difference between one type of fat and another is the fatty acid contained within each. Some specific fatty acids must be obtained solely from the diet (like some amino acids) these are essential for producing hormones and to help with the skin and coat condition and are known as the essential fatty acids (EFAs).

Fats provide the most concentrated source of energy, capable of releasing approximately double the energy per gram of either carbohydrate or protein. Fats can be stored in the body for warmth and are involved in the transport and storage of fat soluble vitamins, A, D, E and K.

## Moisture

It is worth realising that moisture is an important part of any diet, all components of a dog's diet contain some moisture, natural meats contain up to 75% cellular moisture. Without this moisture your pet and for that matter all animals, are unable to survive. This is because water fulfils many roles within the body. Dogs will derive 50% of their moisture requirement from the foods eaten, the remaining 50% being drinking water: moisture within food cells is more easily absorbed and used metabolically than water that has been drunk in its pure form.

## Naturediet: the perfect solution

Naturediet food is manufactured from fresh materials retaining as much of the 'goodness' as possible. The raw materials are mixed with a special blend containing a balanced amount of vitamins, minerals and dietary fibre, and steam sterilised only, then it is sealed by a special method of removing all the air in the pack. Our unique method of production, whilst destroying pathogenic bacteria does not subject the ingredients to extreme temperatures or pressures and the product thereby retains much of its natural goodness and essence. The whole process from adding ingredients to finished product is less than 10 minutes.

If you are feeding your pet the BARF diet because you are concerned about:

- Additives
- Preservatives
- Colourings
- Meat by-products
- Cereal such as wheat, barley, maize and soya
- Unnatural anti-oxidants
- Animal & poultry fat
- Fillers, blenders and gelling agents
- Hydrolised feathermeal

found in many of the commercially produced pet foods, we can categorically state that our products do not contain any of the above.

Naturediet is a readymade, convenient food, which does not need to be kept in a freezer or fridge (unless the pack has been opened).

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