

The Benefits of Fats in Your Dog's Diet

Fats are necessary for the absorption of fat-soluble vitamins. They also provide protection from cold and protect the nerve fibers in the body. They provide more calories per gram than carbohydrates or protein, and improve flavor and palatability of the dog's food. While many commercial dog food brands offer low fat diet to dogs for weight reduction, this in turn increases appetite in the dog, as fat is needed for energy and helps to satiate the dog's appetite. Please note that fats do not affect canines like they do us when it comes to cholesterol or heart disease. Dogs as carnivores do not have the propensity for cholesterol clogging the arteries or producing strokes. High cholesterol or triglycerides in dogs can mean very different health considerations, such as hypothyroidism, diabetes or Cushing's disease. If your dog tests high for cholesterol, always run blood tests to check for these causes.

Lastly, fats provide a source for essential fatty acids. The dogs' diet must have a good source of fat in order to maintain sufficient levels of fatty acids. Rancid fat or poor quality fat can cause a deficiency of these fatty acids. Deficiencies of essential fatty acids are most commonly seen in poor coat and skin condition, such as pruritis (itching), dermatitis (skin inflammation) and seborrhea. A good source of vitamin E is also recommended for the best absorption of essential fatty acids. (3)

The two essential fatty acids that are most commonly discussed for nutrition are Omega 6 fatty acids, and omega 3 fatty acids. The omega 6 fatty acids are found in animal sources, such as chicken and pork. Smaller amounts are found in beef. Larger amounts are found in plant sources, such as olive, safflower and other plant oils. Omega 3 fatty acids are less common, found in fish oil, flax seed oil and marine sources, such as spirulina and blue green algae. (4)

Since the omega 6 fatty acids are found naturally in the diet (animal fats and plant sources) it is not necessary to add this fat to the dog's diet. Research is still incomplete on the optimal balance of omega 6 to omega 3 fatty acids, but currently it is thought to be approximately 5:1 to 10:1. (1) Since most foods already contain high amounts of omega 6 (meat, fat and plant matter) it is important to add good sources of omega 3 daily to your dog's diet.

The best sources for omega 3 fatty acids are found in fish body oils, such as fish oil or salmon oil. Cod liver oil is quite different, as it is lower in omega 3 and very high in vitamins A and D. Fish oil has a readily available form of omega 3, called EPA and DHA. Plant based oils such as Flax Seed Oil contains ALA, which needs to be converted in the body to be of use. Most dogs are unable to do this conversion which results in high amounts of omega 6 from this source, but not much omega 3. A high omega 6 to omega 3 ratio promotes inflammation, poor coat, allergies and skin conditions.

"While flaxseeds or flaxseed oil is not harmful to pets and does supply some essential omega-6 and omega-3 fatty acids, flaxseed oil is a source of alpha-linolenic acid (ALA), an omega-3 fatty acid that is ultimately converted to EPA and DHA. Many animals (probably including dogs) and some people cannot convert ALA to these other more active non-inflammatory omega-3 fatty acids, due to a deficiency of desaturase enzymes needed for the conversion. In one human study, flaxseed oil was ineffective in reducing symptoms or raising levels of EPA and DHA. Therefore, I do not recommend flaxseed oil as a fatty acid supplement for pets with atopic dermatitis (skin problems caused by environmental allergies). Instead, look for fish oil, which provides EPA and DHA." (5)

Other benefits of fatty acids include controlling inflammation, aiding in heart disease, cancer therapy, arthritis and renal disease. In heart disease and cancer, cachexia (muscle wasting) can cause a severity of side effects. Cachexia is caused by excess cytokine production. High doses of fish oil (1,000 mg per ten lbs of body weight) have been found to suppress cytokine, thus increasing life expectancy by maintaining integrity of the heart muscle and reducing loss of muscle mass in some types of cancer.

Because high doses of omega 3 fatty acids are found to reduce inflammation, fish oil is helpful for dogs with arthritis and orthopedic problems. The anti-inflammatory properties have also been found helpful for dermatitis and other skin conditions, as well as for certain gastro-intestinal disorders such as Irritable Bowel Disease and Colitis.

Lastly, omega 3 fatty acids are beneficial for kidney disease. They have been shown to be renal protective, and in certain kidney disorders such as glomerular disease, fish oil helps to reduce inflammation. (4) (6)

In conclusion, some considerations for fat in the diet include:

1. Always include fresh fat sources in your dog's diet, including animal fat (whole milk yogurt, canned fish, meat, eggs) and fish or salmon oil.
2. Don't reduce fat for weight loss in your dog, but rather lower the amount of food served.
3. A dog's reaction to fat, such as loose stools or strong odor may simply mean reducing the amount of fat or food served, or it can mean other disease issues, such as Cushing's disease, pancreatitis, Diabetes, liver disease or malabsorption problems.

Fat is indeed necessary for a dog's diet and is important for energy, skin and coat, health of the kidneys, heart and to keep inflammation at bay in the joints. Fat is not the enemy of your dog, but in fact a very important and good friend.