

Info shared by Pitbull SA.

Manjaro APBT kennel.

South Africa.

My Website <http://www.pitbullsa.co.za/>

My E mail "manjaro@pitbullsa.co.za"

My Facebook "Gawie Manjaro"

My Facebook page "Manjaro Kennel"

My mobile +27827838280.

Zello.com "VoIP" – ask for info.

Krill oil supplement for dogs.

A recent study reports that **krill oil supplementation** increases levels of the essential natural nutrient choline in dogs.

Choline is important for healthy brain development, heart health and liver, muscle and nervous system function.

The study dogs who received krill supplementation were also found to have higher levels of betaine (thought to promote muscle function) as well as significantly reduced homocysteine, an amino acid known to have a negative effect on heart health.

Krill oil is also an excellent source of omega-3 essential fatty acids.

As with all marine products, it's important to use only those that have been sustainably sourced.

A recently published study by Aker BioMarine reports that krill oil supplementation increases nutrient levels — specifically choline — in dogs.¹

In 2018, a six-week trial was conducted with a dog sled team of 20 Alaskan huskies to determine if the [phosphatidylcholine](#) in Antarctic krill increases concentrations of choline and its metabolites in the dogs' plasma.

The 20 high-performing sled dogs were separated into two groups. One group of 10 dogs received the krill dietary supplement; The remaining 10 — the control group — were not given the supplement.

At the conclusion of the six-week trial, the researchers noted a significant increase in choline and its metabolites in the dogs who received the krill compared to the control group.

*"This is especially interesting for dogs in a long-lasting race setting, **when a drop in plasma choline is expected** as seen in humans,"* Lena Burri, Director R&D Animal Health and Nutrition at Aker BioMarine, reported in a news release.

Know this if you into sporting dogs! >> *"As choline is important for muscle function and nerve transmission, a decline might negatively affect the performance of these dogs.*

Furthermore, the dogs were higher in betaine, a product of choline thought to promote muscle function in humans, and showed significantly reduced [homocysteine](#), an amino acid known to have a negative effect on heart health."²

The importance of choline in your dog's diet.

Choline is an essential nutrient for dogs.

Like humans, dogs produce some choline, but not enough to meet all their body's requirements.

Choline has an impact on healthy brain development, heart health, liver and muscle function and also nervous system function.

In commercial dog food, *choline is often added in the form of choline chloride (a choline salt) or betaine.*

However, the **naturally sourced choline** found in krill is in the form of phosphatidylcholine, and research shows that choline in the form of phospholipids is 12 times more efficiently used in the human body than choline chloride.³

It's also important to note that the extreme processing methods used to produce commercial pet food deplete choline as well as critical amino acids.

The study authors conclude that:

"The results of this study are encouraging for krill meal supplementation not only of dogs that perform long-distance races, but also of dogs that have health ailments affecting the brain, [heart](#), and liver.

*However, the exact impact of krill PC supplementation on endurance and health issues of dogs and its comparison to choline salts need to be confirmed in more focused studies."*⁴

In addition to krill oil, other [healthy choline sources](#) include:

Wild-caught Alaskan salmon.

Organic pastured chicken.

Vegetables such as broccoli, cauliflower and asparagus.

Shiitake mushroom.

Grass fed beef liver.

You can also check [here](#) for a more comprehensive list of food sources, including the amounts of choline contained in specific serving sizes.

Krill oil is also a superior source of omega-3 essential fatty acids. Omega-3s are the superstars of essential fatty acids when it comes to the significant health benefits they offer.

[Omega-3 fatty acids](#) include **alpha-linolenic acid (ALA), **docosahexaenoic acid (DHA)** and **eicosapentanoic acid (EPA)**, which play a role in your dog's overall health in many ways, including:**

Alleviating the harmful effects of allergies and other conditions that result from an over-reactive immune system response.

Slowing the growth of common yeast infections.

Regulating blood-clotting activity.

Aiding proper development of the retina and visual cortex.

Slowing the development and spread of certain types of cancer.

Along with these benefits, multiple clinical studies show that omega-3s are helpful in the prevention and treatment of several conditions involving the cardiovascular system, cognitive function, neurological health, inflammatory skin disease, kidney disease and [osteoarthritis](#).

Why I recommend krill oil over other sources of omega-3s

Processed pet food is manufactured at very high temperatures, and since omega-3 fatty acids are sensitive to heat and light, they are inert by the time they are packaged.

Even if you feed your pet homemade raw meals, if you're not following a balanced recipe that calls for extra essential fatty acids (omega-3s from seafood), your dog's diet is probably unbalanced for fatty acids. Not only are omega-3s important, so is the dietary ratio of omega-3s to omega-6s.

Because the average pet diet is heavy in omega-6s, supplementing with additional omega-6s in the form of corn, walnut, safflower or even flax or camelina oil (which contains some vegetable sources of omega-3s, but also omega-6s) can and do create an imbalance that can lead to health problems.

While vegetable oils provide alpha-linolenic acid to a dog's diet, they also supply additional and unnecessary levels of omega-6 fatty acids, especially when supplied in poultry diets.

[Krill oil](#) is the supplement I recommend to ensure your dog is getting enough omega-3 fats in his diet.

Dogs can't efficiently convert plant sources of omega-3 fatty acids (from flaxseed oil, for example) into appropriate amounts of DHA and EPA, so

the best option is to provide one in it's already bioavailable form from marine oils.

As I mentioned, omega-3s are very sensitive to oxygen and can become rancid quickly, so I prefer oils either dispensed from an airless pump or in capsules that can be cut and squeezed onto food just prior to feeding.

With "pour on" oils there is a far greater risk of oxidation over time, so if you do purchase a bottle, make sure to refrigerate it after opening and try to use it up within 30 days.

Try to ensure anything you buy that's taken from the ocean is sustainably harvested, or [MSC-approved](#), and comes from nontoxic fish (the smaller the better, hence my recommendation of krill oil).

Krill has been over-harvested in some areas, so it's important you only buy products that have been sustainably sourced and third party-verified.

Many people afraid to feed fish from the ocean find comfort in the third party-validated, toxin-free marine oils available on the market.

Unlike fish, fish oils can be tested for purity and potency.

If you have concerns about the quality of your fish oil, ask the manufacturer to provide you with third party testing results that demonstrate the product is toxin-free.

Cod liver oil and other fish liver oils, while rich in omega-3 fatty acids, are also very high in vitamins A and D.

Since dogs eating commercial pet foods are already getting adequate amounts of these fat-soluble vitamins, too much can result in toxicosis or abnormal calcium and phosphorus levels that can cause mineralization and calcification of vital tissues and organs, as well as urinary stones.

That's why fish body oils without vitamin D are preferred for pets.

It's important to seek the advice of an integrative veterinarian to determine how to best supplement your dog's diet with the fatty acids he needs for good health and to treat any specific health conditions that may have.