Living With Your Dog Diagnosed with Degenerative Myelopathy

TABLE OF CONTENTS:

INTRODUCTION
I Degenerative Myelopathy: An Overview
II Importance of Proper Nutrition in your Dog’s Diet
   A Home Prepared Dog Food
   B Use of Commercial Dog Food
   C Kibble or Wet, canned form
   D Commercial food recommendations from experienced dog breeders
   E Raw Dog Food
INTRODUCTION
Dogs are more than just our friends; they are our loyal buddies who are always there for us whenever we need them for comfort, protection and even when we need them to lend us a helping hand, or should I say, paw. In all dog breeds, whether they are meant to be house pets or as a part of your work force, all dogs from the toy to the working dog breed will need proper nutrition in order to be in top shape and also, the best treatments if and when they are in need of medical attention.

Dogs are quite intelligent animals and they have a unique ability to bond and connect with their owners, dogs that are treated well and fed well are very energetic and they will never fail to show affection and care for their owners. And as much as we rely on them for their undying love, support and loyalty, they too need to rely on us for their health and nutrition. Needless to say, as much as it is in every domesticated dog’s nature to protect, help and provide comfort to their human family, it is also important that we acknowledge the fact that it is also our responsibility to make sure that our dogs will always have the best food available, the most appropriate treatments and most of all, to give them the attention that they need.

All responsible dog owners and most especially, dog enthusiasts want that all our dogs be in the best condition possible. Your dogs need to be in their top shape and in their best when it comes to speed, agility, strength and also when it comes to their intelligence. Your dog’s diet plays a vital role in your dog’s wellbeing; it is basically the most important component there is when it comes to your dog’s entire behavior, personality and performance. And when it comes to problems with regards to your dog’s health, owners need to understand that opting for proven and effective products such as Sanus-Biotex, and opting for clinically proven treatments can and will matter in the long run and will be a big factor that can hasten your dog’s recovery process.

There are a lot of dogs who are afflicted by Degenerative myelopathy today, and with the numbers of dogs at risk increasing, a lot of dog enthusiasts are afraid that their own dogs would succumb to this degenerative and debilitating disease. Though with all frankness, we are sad to say that many well-loved canines ultimately have fallen ill, dog owners today need to understand that there is a proven way which can help prevent the onset of degenerative disease and may even stop degenerative myelopathy in its tracks.

Since conventional medicine does not offer any clear answers with regards to the treatment of degenerative myelopathy, many dog enthusiasts are left with a devastating dead end, fortunately, with the help of scientific research and alternative approaches, there is new hope in finding a way to save your dog’s life. In this eBook you will find many of the information that you will need in dealing with degenerative myelopathy, we hope that you will read on and be well equipped for the sake of the life of your trusted friend, companion and canine family member.

Degenerative Myelopathy: An Overview

There are practically a lot of diseases which can affect your dog, but few however, are as severe and as heartbreaking as Degenerative myelopathy (DM). Many dog owners don’t really have an inkling of what DM is all about, however, many of us have seen the sad fate of dogs which are
There are a lot of things that you can say to describe degenerative myelopathy, and for sure, all of them are severely negative. But practically speaking, degenerative radiculomyelopathy or degenerative myelopathy is an insidious, chronic and progressive disease amongst many canine breeds which will eventually cause paralysis and paraplegia. To add more, conventional medicine labels this disease as ultimately life-threatening and most importantly, incurable and irreversible. In truth, conventional medicine states that even until today, there are no conventional treatments that can stop or at least slow down the progression of DM.

Extensive information about the disease is still unavailable and there are still a lot of things which remains to be unknown with regards to DM, despite genetic and clinical studies, the etiology of the disease remains to be widely speculated. In 2008 however, it was made known to the public that the mutated gene which was responsible for DM can be found in as much as 43 dog breeds from German Shepherds, Welsh corgis, Boxers and many more.

To help you better understand a probable cause of DM, myelin is a dielectric, electrically insulating material that forms the myelin sheath, and its job is basically to insulate the neurons around the spinal cord. One theory proposes that the immune system itself would attack this sheath causing the loss of communication between the nerves in the lower extremities and the brain as it breaks down. This theory state that DM is an autoimmune disease and this theory is well regarded since in DM, the spinal cord is attacked first causing ataxia or the loss of coordination in the hind limbs.

With Degenerative myelopathy, older dogs among the known breeds are at high risk, the onset of the disease is usually between 7 to 14 years of age but some dogs as early as 5 years of age have also been affected by it. As soon as lesions on the dog’s spinal cord occur, the dog will begin to experience muscle weakness and the lack of coordination which may first appear to be a sign of arthritis. It is very hard to diagnose DM in dogs specifically because of the lack of much information and many of its early symptoms are synonymous to many other common canine diseases. The Orthopedic Foundation for Animals however, was able to develop a DNA Test which can help determine if your dog carries the mutated gene, it is however limited to certain dog breeds and will determine if your dog does not have the gene, does have the gene but will not develop into DM or does have the mutated gene and may develop DM.

The outlook of DM treatment is still grave, the diagnosis is still crude since DM can only be diagnosed through elimination, that is, the disease is only presumed to be present after clearly eliminating all other possible diseases. One of the probable warning signs that you can see if your dog has DM is by checking on the innermost part of their nails for uneven wear or tear, you can also check if your dog has a slow reflex when the hind paw is turned backwards, has difficulty in laying down or rising, for the presence of knuckling under and dragging the rear legs. All these of course are just presumptive and taking your dog to a veterinarian is the best thing to do to rule out any other possibilities, nevertheless, these warning signs should still be considered since in DM the earlier the treatment is given, the better the chance of slowing down the progression of the disease.

We all find it difficult if and when our dog has been diagnosed with DM, usually, the paralysis will take over the entire hind quarter and even making it hard for your dog to balance while walking and your dog can even develop incontinence as the disease takes its toll. Without proper treatment, there will be front limb involvement as well as significant muscle atrophy. In the end, brain involvement may begin to occur and respiratory difficulties will be inevitable, at this point
 euthanasia may become a need. Since DM is really a difficult disease to deal with and with all the road blocks with its diagnosis and treatment in conventional medicine, there are actually new treatment approaches which includes alternative treatments and a radical new outlook on your dog’s diet which may provide an invaluable clue as to how to prevent DM or help dogs with the disease.

The Importance of Proper Nutrition in Your Dog’s Diet

Proper nutrition is regarded as one of the most important considerations when it comes to battling against degenerative myelopathy. Proper nutrition is definitely one of the factors that can determine whether or not your dog will be able to avoid DM or even put the disease’s progression to a torpid state. A lot of dog owners fail to realize that when something is wrong with your dog’s health, it may not be just because you failed to provide your canine with the proper treatment; it can also be because of your failure to provide your dog with optimum food for optimum nutrition. When diseases starts to happen, or when you find your dog less attentive or less energetic, retrace your steps back to your dog’s diet and find out if your dog has been eating properly and if you have been providing your dog with foods that can truly give them nourishment.

Though nutrition is one of the key factors that can work against DM, there is very little attention given to it since most focus on the treatments itself not knowing that what their dog is eating may be the reason why the treatments are not succeeding or why all other precautionary or corrective treatments are nugatory. When it comes to nutrition, there are two factors to be considered, the diet itself and also the dietary supplementation, it has been noted that dietary supplementation has a mild effect in slowing down the progression in DM; diet however, has shown a powerful influence against chronic degenerative diseases and dietary regulation may play a significant role in the development of such diseases.

With dogs that are built for work and labor, adequate nutrition must be provided daily, a lot of kennel clubs and licensed breeders especially for German Shepherds advice that feeding pups
with what their parents were accustomed to feeding is vital. Many of the dog pups have sensitive
digestive systems and might have a hard time digesting foods which its system is not familiar
with, this factor needs to be considered and choosing what you feed your dogs must be based on
this as well as its nutritional requirements and the health issues that their breed is genetically
predisposed with. The further the animal’s diet departs from its evolutionary diet, the more
health problems that animal is likely to develop, that being said, a full-grown, average-sized
dog’s diet must contain all the following nutrients in the right balance:

- Proteins, essentially from animal sources
- Digestible fibers
- Vitamin C
- Essential fatty acids, particularly Omega-3
- Complex carbohydrates in low quantities
- Essential minerals in trace amounts

**Home Prepared Dog Food**

In preparing dog food at home, it is best to keep in mind that homemade dog food is always
better since you will have the option to look for and include the best ingredients to make the
meal. The more natural the ingredients are, the better it is for your dog and the more food sources
you utilize each time, the more your dog will be able to have varying nutrients. It is very
important to maintain the right proportions of these nutrients in your dog’s diet. Depending on
the breed of your dog, Vitamins and proteins should make up the bulk of what they eat.
Fat should not constitute of more than 8% of your dog’s daily diet and carbohydrates should be
given very sparingly, not more than 2% each day. Dog owners should also keep in mind that not
only is the proportion very important; you will also have to consider the fact that the food
sources of such nutrition also needs to be considered. Meat is primarily the main source of
protein but depending on what meat you feed your dog, it may contain higher or lower amounts
of fat and or amino acids. Lean meat cuts should be used if possible since meat should not be the
main source of fat. Safe and healthy fat sources for your dog may include coconut and sunflower
oil, both of which are easily digestible with sunflower oil being an excellent unsaturated fatty
acid source.
The omega-3 fatty acid is also another important element in your dog’s diet; you can easily
provide this fatty acid on your dog’s meal by adding poultry meats or egg yolks. You can add in
whole grain flour as well as high fiber vegetables, however, adding in too much is not advisable.
Large dog breeds are highly prone to bloating and all the insoluble vegetable fiber and starch in
grains would just worsen the situation for your beloved canine companion. You may however,
add potatoes and carrots to your dog’s diet in small quantities as this will give them just the right
quantities of carbs and vitamins.
Dogs need a lot of Vitamin C especially German shepherd breeds, vitamin C can effectively
lessen the risk for joint problems and will also allow your dog to have a shiny coat. Coupled with
the right amount of Omega-3 fatty acids, this will help keep your dog's coat shiny and luxuriant.
Most reputed dog food brands offer a near perfect nutritional combination, ideal for different
breeds, and you can opt for one of them once your dog has reached adulthood. The fat
requirements of many dogs are slightly more than a pup and the primary nutrients of an adult
shepherd would primarily include proteins, fibers and fat in that order. Refrain yourself from
giving your dog food or treats with sugar, refined carbohydrates or preservatives in it as eating these things is detrimental to the dermal health of dogs. The effects can be seen when your dog has a tangled, dull coat and with excessive shedding. Giving your dog a well-balanced diet is very important; you can’t give your dog too much protein since it can alter your dog’s behavior, it can either make your dog restless or over excitable. An unbalanced diet can lead to health problems, such as flaky skin or your dog's coat becoming 'mangy' so if you see your dog especially your German shepherd, continuously scratching or biting itself this could be a symptom of poor dietary control, mineral or vitamin deficiency, and you may need veterinary assistance. Feed your dogs twice a day and make sure to do it at regular scheduled times. Don't feed late at night and make sure your dog has plenty of exercise. Always wait at least 30 minutes for your dog to settle down before feeding. If you feed your dog as soon as you get back home, he will still be in an excitable state and will no doubt 'rush his food' and your dog may end up with possible stomach problems, flatulence and other digestive problems.

Use of Commercial Dog Food

There are two kinds of commercial dog foods that you can utilize to feed various dog breeds, a lot of these commercially prepared dog food are actually optimized when it comes to the right levels and balance of protein, carbohydrates, fat, vitamins and minerals. These however, may contain preservatives and other chemicals which are not that suitable for dogs since they are not accustomed to ingest any of them. The dry dog food is called kibble while its counterpart is the wet, canned dog food, in purchasing these kinds of commercially prepared dog food, there are a couple of things that you need to look out for.
Protein content - First of all, you must look for the USDA approved Human grade ingredients mark, this label will certify that only the best ingredients were used in making the dog food, only the best dog food companies will have it. You must also make sure that the ingredients used all came from reputable countries or sources which were checked by the USDA in order to ensure the quality of the product. The next thing that you need to check is the meat or protein content, this factor alone will tell you a lot with regards to the quality of the product, this is because protein is the most vital substance in your dog’s diet. You must check the position of the meat ingredient on the label and you need to find out how many times it is listed before the fat source and if the type of meat is specified. All good dog food products have meat as its first ingredient, if listed more than once before the fat source, this indicates a higher meat quotient (protein) and, therefore, a very nutritious dog food. The meat source MUST be specified; the product must let you know if the meat came from beef, chicken or etc., you need to avoid products with generic labels such as “meat”, “meat meal” or “meat and bone meal”. Labels with the word “By product” on it should also be avoided.

Quality sources of fat - Look for quality sources of fat, the product that you buy should specify from which source the fat content came from. Look for chicken fat, olive oil, canola oil, flax oil, and etc. In addition, the presence of Omega Three and Omega Six, gives a very good indication that the product is a good commercial dog food. Do not buy products which contain non-specific fat sources such as “meat fat”, “poultry fat”, “vegetable oil”, lard, and etc.

Quality grains - Grains are not essential to the canine diet. The best commercial dog food products will either contain no grains at all, or they will not appear in abundance before the fat source on the labels. If there are any grain content, look for products which specifically has rice, barley, oats, and etc., avoid products with a lot of grain fillers and unspecified grain sources.

Fruits and vegetables - Although fruits and vegetables are also not essential to a dog's diet, many of the best commercial dog food manufacturers do contain some amounts of fruits and vegetables. If there are vegetable content, look for vegetables such as potatoes, sweet potatoes, carrots, peas, beans, broccoli. And conversely, look for apples and blueberries for fruits. Avoid products that contain onions, apple pomace, grape pomace or citrus pulp.

Preservatives, colors and other chemical additives – As mentioned earlier, some chemicals and preservative can be found in dog food, you need to know which ones can be used and which ones are harmful to your dog’s health. Look for natural preservatives such as Tocopherol (Vitamin E), and Ascorbic Acid (Vitamin C), while on the other hand, try to avoid products which contains artificial dog food preservatives and chemical additives such as Ethoxyquin, (BHA) Butylated hydroxyanisole, (BHT) Butylated
Kibble or Wet, Canned Form

There is a lot of debate with regards to which dog food form is much better to use, both forms do have their own strong advocates and for certain, both do have their own benefits. Needless to say, I am more of a naturally prepared dog food advocate, but to help some of you who do use commercially prepared dog food, here is a bit of information that you may be able to use. First of all, there is obviously a huge difference in moisture content for both forms; canned form has about 70-80% of moisture while Kibble only has 10%. Though the wet, canned form is a bit more “appealing” because it looks like real food, it actually has a lot less nutrient content, only approximately 1% of nutrients are present compared to Kibble’s 90% nutrient content. Most dogs may prefer to have canned food but canned foods are usually soya based products that are made to look like meat. Some are beef or chicken based and mineral and vitamin supplements are added to improve your dog’s health. Canned dog food is also a lot more expensive than Kibble and perhaps the best judge between which is better would be your dog and his or her unique taste.

There are however, some benefits with regards to the canned form, aside from the fact that a lot of dogs prefer it probably because of its palatability; since it is in a wet form, fresher and meatier ingredients are usually utilized. The canning process will also allow the manufacturers to avoid using synthetic preservatives though opened cans needs to be refrigerated and discarded until 2 to 3 days since it can easily spoil. The moisture content can also help make your dog feel fuller. Kibble on the other hand can be stored without any problems and can actually offer a lot of convenience, it does not easily spoil when left uneaten on the dog bowl unlike canned dog food which can easily go rancid and may cause indigestion. It can be left for 24 hours outside but its nutritional value will be lost due to oxidation after 3 hours. Kibble also has dental benefits, because kibble is rough textured, firm and dry, it can remove plaques on your dog’s teeth.
Dogs do not have to be limited to just one form of dog food; there are instances where one or the other may be the better choice. Dog owners need to adjust accordingly depending on what their dog’s needs are, in many cases, topping or mixing both forms makes a very hearty meal.

In degenerative myelopathy, the immune system is the main consideration, and though the elimination of toxins in pre-processed foods may also prevent immune diseases, the main immune alteration which led to the disease remains to be unaddressed when it comes to the use of commercially prepared food. Nevertheless, optimum nutrition is still very important and should always be maintained to keep dogs healthy and to make sure that the progression of DM is kept as slow as possible.

**Commercial Food Recommendations from Experienced Dog Breeders**

Eukanuba: German Shepherd Formula


Royal Canin: German Shepherd Puppy 30


Royal Canin: German Shepherd 24


Innova: Adult Dry Dog Food - Large Bites


Innova: Adult Canned Dog Food


Nutro: Nutro Natural Choice Dog Food – Large Breed Puppy


Canidae: All Life Stages Formula


Wellness: Core


Eagle Pack: Dog Formulas


**Raw Dog Food**
Raw feeding is the practice of giving your domesticated dog raw food; the diet can be composed of raw, uncooked meat, organs as well as edible bones. This practice comes from a belief that these food items are a lot better than processed dog food. There is a firm belief that raw feeding will help give your dog a shinier coat, reduced oral problems, a better breath, and an overall improvement in health. In many cases, raw dog food advocates are opposed to the process of feeding dogs with commercially prepared dog food because of the belief that constantly feeding your dog with commercial pet foods is detrimental to their health. There are concerns with regards to the use of raw dog food, raw food items are naturally harder to digest especially among dogs who have just recently been fed raw and raw food does have bacteria, nevertheless, proponents believe that the benefits will outweigh all these factors as dogs are basically able to handle any obstacles of raw feeding simply because their digestive systems were designed by nature to specifically ingest them. Dr. Ian Billinghurst, the owner of the ‘Barf’ diet registered trademark, argues that dogs have been in existence for millions of years on raw diet and because their ancestors have been programmed to eat raw food, it is also logical to feed their domesticated counterparts with food which are a lot more biologically appropriate. There is a big objection against processed or commercialized dog food simply because as the food goes through heat the digestibility of the amino acids decline and the nutrient value goes down as well, this is why a lot of manufacturers supplement their products after the heating process. Some raw food proponents also claim that dogs that eat commercialized pet food are often left with food debris which is stuck on their teeth allowing bacteria to breed thus causing sore gums, bad breath and bacterial poisons that affect the rest of the body. There are two kinds of raw diet types, the BARF Diet as well as the prey - model, both of these types have their proponents and they too both have advantages and disadvantages. In both types, arguments about whether or not dogs are in need of plants in their diet, the inclusion of bones and whether or not dogs are carnivores and omnivores are present. To optimize your dog’s nutrition, you need to explore all possible dietary options; this is because there is proof that these dietary alternatives do have more nutrients, do not have any preservatives and a lot of raw feeders have attested to their dog’s improvement with regards to their overall health and even in stabilizing the immune systems of dogs with degenerative myelopathy.

Prey – Model Raw Feeding

The prey – model diet is designed to mimic the proportions which can be found in a prey animal for your pet’s food. Basically, the prey model is composed of approximately 80% meat, 10% bone, 10% animal organs. Prey - model raw diet is about feeding whole foods instead of chopped or ground foods. Chewing through whole cuts of meat, both boneless and bone-in, tendons and cartilage helps keep the teeth and gums healthy and the act of gnawing and ripping meat and the crunching of bone will also provide mental stimulation for your pets. Prey – model is said to drastically improve your dog’s health, in this raw feeding type red meat and red meat organs are much preferred over poultry and fish because red meat contains more vitamins and minerals. The standard feeding percentages for most adult dogs (including German shepherds) are:
• 1.5% of body weight per day for slight weight loss
• 2.0% – 3.0% of body weight per day for maintenance
• 3.5% of body weight per day for slight weight gain

In general, proponents of the prey – model diet generally believe that dogs are carnivores and will tend to feed more meat to their dogs in the right proportions with the inclusion of a small amount of vegetables and plant matter. In the prey – model diet, supplementation is basically not used or needed, in order to provide dogs with optimum levels of nutrition, a lot of its proponents will diversify what they feed to their dogs by making sure that they will provide them with a variety of animals. Since the omega-3 fatty acid is a bit hard to come by from natural sources, a lot of prey – model feeders will opt for supplementation by adding fish oil to compensate in case the right food sources are not available.

When initially starting the raw diet, it is best that you start with 2% of the adult body weight, feeding too much food including kibble will actually cause diarrhea and you have to keep in mind that increasing the amount of food that you give to your dog is easier if and when your dog needs it as opposed to lessening the food intake when your dog gets too fat.

**Raw and Cooked Bones**

Bones are another issue that needs to be addressed, many raw feeders are afraid that feeding them to your dog can cause lacerations in your dog’s digestive system and so, cooked bones must be avoided because they are less digestible and can easily splinter and cause perforations anywhere between the esophagus and the anus of your dogs. Edible bones are highly recommended when it comes to your dog’s diet, they provide the bulk needed to form a proper stool and are a source of calcium, phosphorous and other nutrients. They are covered with lots of meat and are soft enough to be eaten without causing damage to the teeth. They are found in animals like: poultry, rabbits, goats, lambs, calves, and rodents. What makes bones edible depends solely on your dog; you will have to observe closely with how your dog reacts after you feed them. Raw edible bones are fairly flexible and will barely splinter, there is still however, a possibility that a raw bone can cause problems such as perforations, blockages, choking, tooth fractures, etc. but most of the time, it is due to improper feeding such as when the bone is cut, is too small or is bare.

**Wreck Bones**

Wreck bones are bones that are too hard and dense for your dog to eat. These bones are also called recreational bones, rec bones, dog bones and soup bones. They are notorious for chipping and breaking teeth, causing perforations and blockages, to make matters worse, any tooth damage done by these bones may not be noticeable at first. Even though they have the potential to cause so much damage, many pet food companies market them as being the perfect tooth cleaning chew for dogs. Many grocery stores and butchers market these bones, stripped of most or all of their meat, as being perfect for dogs as well. You can feed a raw wreck bone only if it is covered with plenty of meat and only if your dog will not try to eat the bone or will only gnaw or nibble gently on the bone.

**Organ Meats**

In prey – model diet, organ meats are an essential part, dogs must be fed with secretory organs such as the brain, spleen, liver, kidney, testicles, ovaries, pancreas, thymus, eyeballs, etc. Non-secretory organs however, such as the heart, lung, gizzard, uterus, stomach, intestines, tripe, etc. are fed as non-organ meat.

**Vegetables, Fruits and Grains**
Canines are opportunistic carnivores, this means that they thrive by eating other animals but can survive by eating fruits, vegetables, grains, grasses, carrion and rotting garbage. They however, lack the grinding molars of omnivores and herbivores and their jaws are shaped to prevent the lateral movement needed to grind fruits, vegetables and grains. There has been debate over whether wolves and other wild dogs would eat the plant material found in the stomachs of their prey, though it does happen when they eat small animals because of their size and because they are usually eaten whole instead of being ripped apart. When eating large prey however, the digestive contents are usually ripped open and spilled over. Wild dogs will eat berries and some vegetation but the amounts are miniscule and so must the proportions of your dog’s prey – model diet be.

Supplements and Vitamins

Vitamin supplementation should not be needed if the dog is being fed a variety of red meat cuts from a variety of types of animals and or whole prey animals and getting the proper percentages of meat, bone and organs.

Starting a Prey - Model Raw Diet

To begin feeding your dog with the prey – model diet, start off by feeding your canine with normal dog food; wait for at least 8 hours up to a day and then feed them with a raw only diet. You can feed them with a whole chicken, cut-up in appropriate sizes; you don’t really have to worry about the proper meat, bone and organ ratios in the beginning. Initially, the main focus is to get your dog’s digestive system accustomed to the raw diet, the kidneys and the backbone will be sufficient enough to cover for the bones and organ meat. Liver is the 1st organ to introduce and makes up 2.5% – 5% of the prey - model raw diet with 5% being considered ideal. Some dogs may not be able to tolerate the full 5% no matter what you do. The easiest way to feed liver is to freeze it and shave off one paper thin slice. Do not introduce anything new until your dog is eating its full portion of liver and has normal stool for one week.

Introducing other non-liver organs is the next step. Non-liver organs make up 2.5% – 5% of the prey - model raw diet with 5% being considered ideal, your dog should ideally be fed a variety of non - liver organs from a variety of prey animals. Organs can be hard to find though but you may look for them in ethnic markets. If you can only find one type of non – liver organ, that organ will make up the full 5% of the other organ portion of prey model raw. Do not introduce anything new until your dog is eating its full portion of the non - liver organ and has normal stool for one week, afterwards, you can begin introducing new things into the diet: new proteins, new organs, and organs from a variety of prey animals, whole prey, animal heads, etc.
The BARF Diet

Now this is the raw diet type that excites me the most, and not without cause though because the barf diet is truly something that you need to watch out for especially against degenerative myelopathy. The BARF diet is basically a cutting edge nutritional program which, as recent studies have shown, may hold the key to effectively optimize your dog’s treatments against DM. BARF stands for Biologically Appropriate Raw Food or Bones and Raw Food, this diet is all about feeding dogs properly and returning them to their evolutionary diet. BARF diets were formulated and developed by Dr. Ian Billinghurst and Robert Mueller who together have more than 50 years of combined experience and study in raw foods.

A Biologically Appropriate diet for a dog is one consisting of raw whole foods similar to those eaten by the dogs' wild ancestors. The food must contain such things as muscle meat, bone, fat, organ meats, vegetable and fruit materials combined in precisely the correct balance just as Mother Nature intended. Even until now, specific guidelines in caring for your dog with DM, an outlined medical treatment and a definite scientific solution still evades conventional medicine, and this is where the unconventional or should I say, the alternative yet holistic approach comes into play.

In degenerative myelopathy, the immune system plays a vital role, in fact, many DM treatments rely heavily on the suppression of the immune disease, and though the elimination of toxins in pre-processed foods may also prevent immune diseases, the main immune alteration which led to the disease remains to be unaddressed. Fortunately, the BARF diets, as well as many other natural nutritional programs have shown great success with regards to correcting and stabilizing the immune system in dogs with DM.

Unlike a prey model diet, BARF diets generally recommend feeding ground, not whole foods, vegetables, and very bony body parts like necks, backs and wings, even supplements which were unnecessary in a prey-model diet because all requisite nutrients already exist in whole foods.

Rapid and lasting benefits of the BARF Diet

With the help of the BARF diet, tarter buildup on the teeth is eliminated, breath is improved and your dog will have strong, beautiful teeth using our toothbrush from Mother Nature. Itchy skin conditions associated with allergies will be alleviated and you can expect a shiny and lustrous coat. Chronic Diarrhea often disappears and stool volume and odor is significantly reduced. Your pet’s weight will be brought into line and it’s easy to maintain a leaner, fitter body allowing your pet’s health, vitality and wellbeing to improve drastically. In dogs with DM I am happy to say that this diet can even strengthen your dog’s immune system and even arthritic pets will even begin to experience increased mobility.

You can avail of BARF diet products (patties, supplements, books) at
http://www.barfworld.com/cgi-bin/product.cgi
Lacto – Fermented Pet Food

A lot of people may be wondering what lacto – fermentation is all about, this process is actually designed to preserve vegetables and other food items and is actually a form of pickling. The entire process of lacto –fermentation happens when the sugars found in fruits and vegetables are converted to lactic acid by non-harmful bacteria. Most of the time, this is done with the use of Salt and whey when pickling but there are a lot of recipes that you can follow in order to get the best results.

Lacto – fermentation will not only bring about more flavors in the fruits and vegetables it will actually help preserve food, and will increase its vitamin and nutrient content. Lacto – fermentation is highly recommended not only because it is easier to store and prepare in bulk, it will also boost the levels of nutrients that your dog is taking. The most common bacteria present in these kinds of preserved food is lactobacillus, this bacteria will help your dog’s digestive system and the lactic acid, found as a by-product will also help increase the levels of good bacteria. In a way, feeding your dog lacto – fermented food aside from their share of raw fruits and vegetables will actually give them a lot of benefits.

The Benefits of feeding a raw diet

As mentioned, there are a lot of benefits for opting a raw diet for your dogs; some of them are as follows:

- Improved general health
- No doggy odor
- Shinier coats and healthier skin
- Higher energy levels
- No finicky eaters
- Puppies growing at a slower rate, decreasing the change of strained joints in pups growing too fast
- Naturally white healthy teeth
- Decreased incidence of bloating
- Stool volume is decreased due to the fact that the dog is utilizing everything out of the food. It's not just passing it through
- Stools are also less odiferous
- Easier maintenance of healthy weight
- Calmer demeanor
- Happy, healthy, energetic and alert dogs

Some Cons to feeding Raw

There are some cons to feeding raw, though in general, dogs may be able to cope with these cons, it will be best if you will try to consider them first so that you will be able to adjust accordingly if and when your dog’s body will not be able to adjust accordingly.
As mentioned in previous topics, feeding bones may pose some risk for dental fractures and perforations, and with regards to the presence of bacteria, raw meats, because they are not heat treated may contain microbes which are harmful for your dog’s health. Pathogens are significantly abundant in raw food even in commercial raw food items. The purchase of raw meat however, from trusted sources as well as the freezing and defrosting can decrease such risks. Freezing adequately at the proper temperatures and time period can also destroy parasites. Live preys also have significantly higher pathogens and this is why buying meats is much preferred.

Other cons are as follows:

- A dog without a healthy immune system may not be able to digest the food. Consider the use of probiotic supplements if this is a concern.
- Potential for whole bones to choke an animal, break teeth or cause an internal puncture.
- Constipation: Happens if fed too much bone. If constipation or problems passing stool becomes a problem simply feed less bone and feed more meat or organs. Kibble can also cause constipation.
- Parasites: If you are getting your meat from a human-approved source, this should not be an issue.
- Bacterial septicemia: Rare and usually occurs only in immunocompromised pets, sick pets or pets with underlying health issues. Kibble-fed dogs can also develop this.
- Pancreatitis: Pancreatitis, kidney disease and other diseases typically get blamed on raw food. In reality, there were underlying factors and or underlying diseases that were made evident after a diet change. It is typically kibble-fed dogs that suffer from pancreatitis and it becomes evident after they receive a fatty meat food item that they are not used to having. If a fatty meal triggers a bout of pancreatitis, then that means the pancreas, and possibly other organs, are not well. A healthy dog with a healthy pancreas will not suffer from any problems with raw diet.
- An unbalanced raw diet may damage the health of dogs if given for an extended period.
- Aggression: Raw meat does not make a dog aggressive or a killer or “blood thirsty.” It is a high-value item to the dog though and some dogs that have never shown signs of food aggression may show signs of food aggression after starting raw. This is dealt with the same way any resource guarding issue is dealt with.
- Raw feeding can cost more than kibble. However, if you buy in bulk and you will spend less money than on a premium kibble.
- The preparation time for each meal takes longer.

### Raw Food Recipes

**Raw Food Breakfast**

Here is a simple example of what raw food you can feed your dogs for breakfast.

- 1/4 cup rolled oats
- 1/2 cup yogurt
- 1/4 cup vegetables – A selection of shredded, lightly steamed or purced Carrots, celery, spinach, yams and/or broccoli, apples
- 250 mgs vitamin C - for dogs, crushed
- 1 teaspoon honey
- 1 teaspoon apple cider vinegar
1 teaspoon kelp seaweed powder -- purchased at health food store or pet store
1 teaspoon alfalfa powder -- purchased at health food store or pet store
1 teaspoon flax seed oil -- purchased at health food store or pet store

1 digestive enzyme -- for dogs Optional
1/4 cup kibble -- optional
Soak rolled oats in yogurt overnight. Mix all ingredients and serve. Add kibble if desired.

35 Raw Food Dinner
And for Dinner, here is the menu.
3/4 pound Raw Meat – You can use raw beef chunks (not ground), raw chicken, mackerel, or lamb. Twice a week, you can also use liver or kidney
1 egg -- raw
1/2 clove garlic -- chopped
2 tablespoons yogurt
1 teaspoon honey
1 tablespoon apple cider vinegar
1/2 teaspoon flax seed oil -- purchased at health food store or pet store
1 teaspoon kelp seaweed powder -- purchased at health food store or pet store
1 teaspoon alfalfa powder -- purchased at health food store or pet store
250 mgs vitamin C -- for dogs
1/4 cup kibble -- optional
Mix together and serve.

35 Basic Raw Dog Food Recipe For a 20-25# dog
1/2 cup raw meat (ground poultry, beef, lamb, organ meats)
1/2 cup raw pureed vegetables (variety!)
1/4 cup cooked whole grains
1 teaspoon bone meal powder (double for puppies and pregnancy)
1/4 tsp. ascorbic acid powder with bio-flavonoids (vitamin C)
1/4 tsp. kelp powder

35 Raw Meat Mix - The “Unstew” - $7.00, 10 minutes
1 lb. raw ground meat
2 cups ground or pureed vegetables
2-4 oz. - Raw organ meat (liver, gizzards, etc.)
Half cup apple cider vinegar
2-3 cloves garlic
1 T ground kelp
Half cup plain yogurt

35 Organic Wings 'N' Things - $7.00, 5 minutes
Half cup organic cottage cheese
Half cup organic grated carrots

35 “Buffaloaf” - $10.00, 1 hour
3 cups ground buffalo (lean)
2 eggs
1 and a half cups old fashioned oats
½ cup grated mixed vegetables, including zucchini, broccoli, carrots, and sweet potato half cup cottage cheese

35 Canine Casserole Recipe - $3.50, 15 minutes
1 cup cooked chicken or turkey
Half cup steamed vegetables (carrots, broccoli, squash, spinach, sweet potato)

Nice Rrrrice - $3.50, 40 minutes
2/3 cup meat of choice, cubed
Three quarters of a cup carrot and sweet potato, cubed
Three quarters cup instant brown rice
1 cup water

35 Pupper Fish - $4.50, 30 minutes
1 can salmon, deboned
1 beaten egg
3 Tbsp. cornmeal
1 potato
1 carrot

1/2 teaspoon flax seed oil -- purchased at health food store or pet store
1 teaspoon kelp seaweed powder -- purchased at health food store or pet store
1 teaspoon alfalfa powder -- purchased at health food store or pet store
250 mgs vitamin C -- for dogs
1/4 cup kibble -- optional
Mix together and serve.

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1 potato
1 carrot

1/2 teaspoon flax seed oil -- purchased at health food store or pet store
1 teaspoon kelp seaweed powder -- purchased at health food store or pet store
1 teaspoon alfalfa powder -- purchased at health food store or pet store
250 mgs vitamin C -- for dogs
1/4 cup kibble -- optional
Mix together and serve.
through. Chop and steam the vegetables. Cut salmon patties into small bites and combine with the vegetables. If the mixture seems too dry, add a bit of cottage cheese or yoghurt.

**Turkeyloaf & Veggies**

1 1/2 pounds lean ground turkey
3 stalks celery, chopped
2 carrots, grated
1 apple, cored and diced
2 eggs
2 slices white bread, torn into pieces
1 cup regular rolled oats
1 cup wheat germ
1 (6 ounce) can tomato paste
4 medium potatoes, cubed

Mix it all up together and bake in your oven on medium for just over an hour.

When done, cut it into the correct portion size for your dog and store in the fridge. I feed my dog a healthy commercial kibble with this Turkeyloaf.

All up including the cooking time, I usually complete this dog food recipe in about 1.5 hours.

**Doggie Stir Fry**

1 pound lean ground beef
Bag of carrots
About 2 stalks broccoli
Whole wheat pasta

In a pan cook meat carrots and broccoli together until the meat is well cooked, and water and olive oil if wanted.

Cook pasta in water however long it says on the box put in with the other ingredients and then cook - and serve!

**Turkey Neck Supreme**

1 lb. turkey necks
1-1/2 cups blended greens
1 egg

1 tsp. kelp flakes
1 tbsp flax seed oil

**Beef Dinner**

1 lb. beef
1-1/2 cups blended greens and carrot
1 tsp. kelp flakes

1 tbsp. flax seed oil
& a bone for desert

More recipes for raw feeding

You don’t have to keep on using the same recipes, there are a lot of choices online and you can also check out these sites for more alternatives. [http://www.vonlotta.com/diet.html](http://www.vonlotta.com/diet.html) and [http://tehillahgermanshepherds.com/diet.html](http://tehillahgermanshepherds.com/diet.html)

**Transitioning to an Alternative Diet**
First of all, when it comes to transitioning your dog’s diet from ordinary or processed food to raw food, you need to keep in mind that the menu needs to be as flexible as possible. Forcing your dog to eat according to the recipes immediately might not be beneficial and may cause indigestion and other problems.

The quote “slow and steady wins the race” is very suitable during the transition process and this is because sustainability is the main goal here. It does not matter how fast or how slow your dog will be able to adjust, what matters most is that your dog will be able to avail of a healthier and more nutritious diet by gradually transitioning to raw food.

In many cases, feeding raw food to your dog may seem scary at first, but you need to overcome your anxiety and see for yourself what benefits may be in store for your dogs, if you are afraid that raw meat or bones may cause problems, you can simply try to follow instructions the instructions included in the raw feeding diet carefully to avoid any problems.

Feeding raw food or opting for the BARF diet may be a challenge at first most especially when you have limited kitchen skills and would not even like to cook for your own family, but if you weigh the benefits, you can actually see how important it is that you try your best to make dietary changes for your dog. Implementing a system in food preparation and planning ahead of time will make the transition for you and your dog a lot smoother.

Follow the considerations indicated in the diet that you want your dog to have, as what has been mentioned before, the proportions are not yet that important during the early stages, trying to introduce your dog to the diet is what matters the most.

There are a lot of recipes to choose from, pick out the least complex one and try to consider the ingredients which are readily available first. As soon as your dog has properly adjusted to the diet, you can begin opting for suitable recipes. Look at what each recipe contains in terms of ingredients and nutrients and always diversify and change recipes when possible.

Bones are a big issue in the alternative diets mentioned in earlier topics, and if your dog is a gulper, you may not want to feed whole bones, you can instead try to use grinders and grind the raw bones first before you feed them to your dogs.

Make dog food in bulk to make sure that you will be able to conserve as much time as possible. Big dogs will require huge quantities of food and making them in bulk or batches is a great way to keep up with their needs without having to spend too much time and effort.

Purchase the right tools; buy containers which you can use to keep food from spoiling. You can buy Ziploc containers or air tight plastic containers to keep food from spoilage. Meat cleavers and other tools may be used to cut meat or bone into pieces without having jagged edges.

Weaning your pups to an alternative diet is a good idea, you can use milk and ground meat at first and slowly decreasing the milk content while increasing the meat is a good way to start the diet early.

Supplemental Considerations
In treating degenerative myelopathy strengthening the dog’s immune system is the main objective and thus, making sure that your dog will be able to get the optimum amounts of nutrients from the food that the dog eats or from the supplements that you add into the diet is very important. Degenerative myelopathy is a progressive disease and because there are no known definitive treatments available, making sure that you do all that you can to strengthen the immune system and to slow down the progression of the disease is very important. A lot of food items are labeled as complete and balanced, and these are basically food items which are no longer in need of supplements unless of course, your dogs have special considerations or if they are recommended by your veterinarian. Home prepared food is nutritionally valuable as they usually already have the optimum nutrients with the precise amounts.

With regards to supplementation, there are a couple of arguments which have been noted recently, there are arguments that in many pet foods that have not gone through feeding trials, the vitamins and minerals that it contains are not really metabolized by the dogs and this is why supplementation is needed. And subsequently, another argument for the use of supplementation is that the nutritional guidelines developed by the AAFCO are actually minimums and that the optimum levels of nutrients were not actually determined. Another argument is that supplementations can actually be considered as nutraceuticals or nutrients that are prescribed at certain higher levels to treat or prevent diseases. Supplementation, therefore, is thought to be necessary to give a dog more appropriate levels of nutrition.

In order to determine if your dog is in need of supplementation, it is recommended that you go and have your dog checked by a veterinarian.

**Antioxidant Supplements**

Antioxidant supplements are very useful and they do provide a very bright prospect for increasing the quality and length of life for your dogs. Antioxidants can actually help prevent cellular damage caused by free radicals and they are known to boost your dog’s immune system. In a way, they are provide a major defense against the damage of oxidative stress, aside from its anti-aging properties, it can also help fight against the diseases which affects a lot of elderly dogs and even support your dog’s immune function while reducing the risk of chronic degenerative diseases.

Dogs do need antioxidants; this is because a lot of our dogs today are exposed to harmful chemicals which come from pesticides, cigarette smoke and many other pollutants. Dogs nowadays are also usually fed with commercialized dog food products which contain lesser amounts of antioxidants when compared to fresh food items. All dogs can benefit from antioxidant supplementation more so when they are old dogs or when you want to protect them from autoimmune diseases.
Some useful antioxidants are:
- **Bioflavonoids** – they help to decrease allergic reactions, asthmatic attacks and have anti-cancer benefits for your dog.
- **Green Tea** – it decreases the risk of heart disease and cancer and helps protect the blood vessels nourishing your dog's heart and brain.
- **Lutein** – can protect your dog's eyes and may reduce the risk of cataracts.
- **Melatonin** - acts to normalize sleep patterns. It also protects your dog's brain and has been used successfully with cancer therapy.

**Nutritional Supplements for Bones, Joints & Cartilage**

Nutritional supplements for bones, joints and cartilage is also very important with regards to treating dogs with DM, this is because these supplements can help them get as much strength there is in order to keep their mobility especially with their hind legs. Some nutritional supplements for these areas are as follows:

**Glucosamine** – This is vital for protecting the health and integrity of your dog's bones, joints and cartilage. It helps to decrease joint inflammation and pain, promote cartilage repair, and aid healing of damaged joints, also in increasing mobility in dogs with arthritis and hip dysplasia. Glucosamine can help a lot when your dogs are diagnosed with osteoarthritis and when your dog is finding it very hard to walk properly or have mobility problems.

**MSM** (Methylsulfonylmethane) - a natural source of sulfur that works along with Glucosamine to help protect the health and integrity of your dog's bones, joints and cartilage.

**Essential Fatty Acid Supplements**

Basically, they are called “essential” because dogs cannot actually produce them on their own and they are needed for normal processes to take place and this is why supplementation is advised. There are two kinds of essential fatty acids, these are Omega-3 and the Omega-6 fatty acids, the omega-3 fatty acid can be found in cold water fish while the omega-6 fatty acid can be found in meats, grains and organ meats. These are vital to brain health and help to preserve mental clarity. They decrease the risk of Alzheimer's disease and dementia in dogs, cats and people. Fatty Acids may reduce the risk of heart disease, stroke and high blood pressure.

**Amino Acid Supplements**

Amino acids are basically the building blocks of all protein, there are ten important amino acids and all dogs can synthesize them naturally with the use of components derived from food and nutrition. The ten important amino acids are Arginine, Histidine, Isoleucine, Leucine, Lysine, Methionine, Phenylalanine, Threonine, Tryptophane, Valine. When looking at dog food labels, it is always best to take note of the amino acid content and not just protein content in general; on the other hand, the best sources for amino acids are animal proteins.
Glutamine – Is the major energy source for the cells that line the digestive system and is very valuable in amino acid supplementation. It strengthens your dog's natural defense system and immune system. Glutamine also has many anti-aging effects. It helps to preserve memory and to prevent the harmful effects of Cortisol, the hormone that is responsible for accelerating the aging process in people and in your dog.

Digestive Enzyme Supplements

Digestive enzyme supplements are new trends in canine care; basically, these supplements are used to replenish your dogs’ digestive enzymes because most dog food products will lack them. Digestive stress can also happen to aging dogs and it can lead to problems digestive problems thus increasing the need for enzyme supplements. Some symptoms of digestive stress are excessive shedding, vomiting, low energy and weight loss.

They help your dog's body to breakdown proteins, fats and carbohydrates in their food so they can be absorbed and utilized. They improve the efficiency of digestion so your pet's body can utilize the nutrients essential for energy production and ultimately for life itself. They help the body to recover from disease and promote restoration of good health in your dog. Enzymes are useful to reduce pain and swelling after exercise or trauma and help speed up recovery rates. Enzymes support your dog's immune system thereby enhancing his ability to ward off disease and infection. They have been also been used effectively in cancer therapy for people and pets. Some important digestive enzymes are:

- Papain - enzyme that has aspirin-like effects to decrease swollen, painful inflamed tissues in your dog.
- Bromelain - enzyme found in pineapple stems that inhibits the spread of lung cancer.

Benefits and Cons of supplements

The use of supplements do have its perks, supplements provide much needed amounts of vitamins, minerals and nutrients which are otherwise lacking in many individual food items. Though nothing can beat a well-made dog food that you yourself measured out, supplements are there to properly supply the rest of the nutrients just in case. Supplements are very beneficial if and when your dog has been eating less lately, they are also recommended if your dog is going through illnesses and if they have just recovered from one. Pregnant or lactating dogs are also recommended to take supplementation so do dogs who have metabolic diseases and ones that have certain skin conditions. Veterinarians generally tell us that, if you choose a premium dog food or a dog food that says that it is “complete and balanced”, you are probably providing everything that the dog needs and your dog won't need to take dog supplements or canine vitamins. However, there are some exceptions to this: old dogs, sick dogs, and overweight dogs, dogs with vitamin or mineral deficiencies all need to take supplements to help them get back on top of their game as soon as possible.
Generally, supplements have a positive effect on overall health, effects such as having healthy skin with smooth glossy coat, strong bones and hip, strong paws and nails, muscles tuned for long and healthy life, strong and healthy teeth, clear and sharp eyes, even a calm temperament.

**Supplemental products for Dogs, Specifically German shepherds**

Experienced Dog breeders use different supplements products, such as:

- **Nutritional supplements:**
  - K9 SUPER FUEL - [http://www.healthypets.com/k9superfuel.html](http://www.healthypets.com/k9superfuel.html)

- **Raw Diet Supplements:**
  - Wholistic Digest-All PLUS - [http://www.k9power.com/wholistic-digest-all-plus-4oz.html](http://www.k9power.com/wholistic-digest-all-plus-4oz.html)

- **Digestion supplements:**
  - Bactaquin® Digestive Health Supplement for Dogs - [http://www.healthypets.com/bactaquindogs40.html](http://www.healthypets.com/bactaquindogs40.html)
  - GastricAlm - [http://www.healthypets.com/gastricalm120.html](http://www.healthypets.com/gastricalm120.html)
  - Canine Athlete C9 Digestive Enzymes - [http://www.healthypets.com/athletprobiotic90.html](http://www.healthypets.com/athletprobiotic90.html)

- **Arthritis – Joint supplements:**
  - Cani Flex - [http://www.healthypets.com/ca60chta.html](http://www.healthypets.com/ca60chta.html)
  - IRONDog Brand Joint Supplement - [http://www.healthypets.com/irondog120sc.html](http://www.healthypets.com/irondog120sc.html)
  - Iceland Pure Salmon Oil - [http://www.k9power.com/iceland-pure-salmon-oil.html](http://www.k9power.com/iceland-pure-salmon-oil.html)

**Vitamins and Minerals**

Dogs need vitamins and minerals not found in their diet no matter how high a quality of food that they are eating. It is impossible to get all the essential nutrients from just eating a good quality food or diet this is why giving them vitamins and minerals from outside sources is definitely very beneficial for them. In the treatment of degenerative myelopathy, vitamins play a key role; it is usually listed as part of many treatment approaches against DM.

There are a lot of vitamins and minerals which do need to be properly supplied for your dogs, this is because vitamins and minerals will not only help prevent a lot of canine diseases, it can
also be used to effectively combat various health issues that your dog may be facing. Amongst the numerous vitamins needed by your dog, here are some of the most important ones.

**List of essential vitamins and minerals**

1. **Vitamin A/Beta Carotene** – A fat soluble vitamin and is crucial for all dog’s metabolism, usually stored in the fat cells, Vitamin A levels need to be maintained otherwise its deficiency will lead to various health problems. Without Vitamin A, your dog may suffer from Skin and Coat conditions, Poor Growth, Dull coat, and Night Blindness. Vitamin A is an antioxidant which enhances immunity, essential for your dog to utilize protein in the diet. It is helpful for the growth and repair of body tissues and it assists in the maintenance of healthy skin and mucous membrane. Highly recommended for the eyes and can be used to improve the conditions of dogs with eye, skin and respiratory problems.

2. **Vitamin C** – This vitamin works with vitamin E and helps regenerate vitamin E, potentiating its antioxidant effect. Its supplementation does no harm, since the excess is excreted through the kidney. In excessive dose, vitamin C can cause flatulence and diarrhea, but is very useful in strengthening your dog’s blood vessels and immune system. It can help promote wound healing and it can also prevent infections. It is recommended for dogs with weak immune systems, for dogs with eczema and against chronic infections.

3. **Vitamin E** – This vitamin is an important nutrient which has been shown to have a number of physiologic and pharmacologic effects. It is a potent antioxidant and reduces fat oxidation and increases the production of HDL cholesterol. It is basically an antioxidant, prevents heart disease, and promotes wound healing, it is also needed for your dog's body to utilize Vitamin C. It will help slow down cellular aging from oxidation, and will also strengthen cells and capillary walls.

4. **B - Complex Vitamins** – These vitamins are water soluble and are very important in dogs especially in dogs with degenerative myelopathy, in DM changes in the absorption of these vitamins occur and using supplements will help correct them. It can help in neural regenerations and healthy dogs should have high potency B – complex vitamins while dogs with DM should have the stress formula B – complex vitamins.

5. **Coenzyme Q-10** – This is a powerful, newly discovered antioxidant which is essential for immune system function, and is also beneficial for your dog against heart and dental diseases. A sign of Coenzyme Q-10 deficiency is dry eyes; dogs of all ages need to have it in order to fully protect their heart. It helps strengthen the heart muscles and it can also help maintain the health of the gums, older dogs and dogs which have immune problems should have ample levels of Coenzyme Q-10 in their diet.
Alpha Lipoic Acid – This antioxidant helps your dog restore energy metabolism, it scavenges hydroxyl radicals, singlet oxygen and hypochlorous acid and also helps remove metals through chelation. It has anti-aging properties and Regenerates other antioxidants such as vitamins C and E, and Coenzyme Q10. It is beneficial for aging dogs and as a form of cancer prevention and treatment.

Selenium – This is another antioxidant which works with Vitamin E to help your dog fight infection. It is beneficial to dog’s skin and hair coats and is very important since deficiencies are linked to cancer and heart diseases. It acts on various tissues and it promotes tissue elasticity, it will also assist in maintaining healthy membrane tissue, it is beneficial against inflammations, infections and heart problems and is also useful for cancer prevention and treatment.

Zinc – This is involved in a vast array of metabolic processes in the body; it has been scientifically identified as playing in a key role in over 200 critical enzymatic and metabolic pathways, and is integral to the function of the whole immune system. It is an essential mineral for your dog needs for protein synthesis, it promotes a healthy immune system, and aids in wound healing. It is critical for hundreds of biological processes in the body.

Omega 3 & 6 Fatty Acids – These essential fatty acids are essential component of cell membranes in your dog and is needed for healthy heart, brain function, skin and hair coats.

Vitamins and minerals products for Dogs especially for German Shepherds

Experienced German shepherd breeders have these as part of their own selection:

- Multi vitamins and minerals:
  - Osteo – Form - http://www.healthypets.com/os1ta.html

- Vitamin C
Exercise Considerations

Exercise is by far, one of the most important considerations for the treatment and prevention of degenerative myelopathy; in fact, it is basically on top of the many approaches that can be utilized against DM aside from the proper diet and supplementation. The upkeep of aerobic exercise is very important and should not be overlooked especially when it comes to the prevention of degenerative diseases; there are a lot of studies which prove the effectiveness of aerobic exercises especially with regards to the increase in muscle performance that it can provide.

In humans, it is a proven health consideration which can effectively increase muscle activity, improve muscle memory and even improve the cerebral blood flow of people who take regular aerobic exercises. With regards to dogs with degenerative myelopathy, many of the treatments and approaches are actually accomplished by or done in order to complement aerobic exercise. In a way, we can say that most treatments for DM are aerobic exercises and that the upkeep of the proper diet as well as supplementation are actually done in order to make sure that your dogs will be able to do aerobic exercises.

There are basically two forms of aerobic exercise utilized in DM, a lot of veterinarians recommend that either walking or swimming is the best way to help your dog regain mobility and even slow down the progression of the disease. There are a lot of speculations however as to which one will show better results. I can say as much on the other hand that both do have their merits and that you will have to get your dog to a veterinarian in order to find out what kind of aerobic exercise will best suit your canine. There are instances when walking will help your dog a lot but there are also cases when your dog will need the assistance of water through swimming.

The age of your dog is also another factor that will have to be considered; aging dogs might be suffering from arthritis aside from other degenerative diseases and not giving them enough support will actually bring about a lot of pain. You need to keep in mind that dogs do not have the same pain threshold as humans and they can withstand a lot of pain, seeing your dog experiencing pain especially on the hind limbs will usually mean that your dog is going through something very excruciating.

Nevertheless, let us always remember that for as long as the proper care is provided, exercise is highly recommended to help maintain the canine’s ability to walk as well as to increase the dog’s survival time. This is because the dog’s mobility is usually the first function that will be affected.
and making sure that the disease will not progress any further will ultimately help in the long run.

**Walking Vs. Swimming**

Regular exercise for dogs with DM is very important, but whether or not one form of exercise is better than the other is a debatable issue, there are a lot of proponents for both swimming and walking and because there are a lot of dog enthusiasts who want to know what is best for their dogs, they need to know which form can best give their dogs the exercise that they need. Knowing whether you want to take your dog for a walk or a swim is not supposed to be a trifling matter, but when it comes to DM, you need to know your dog’s limit and you need to find out what exercises can help them the most.

First of all, walking exercises are very beneficial for dogs with DM because it can help build up their strength, walking your dog without the help of any aids will help build up the muscles and will ultimately make it strong mechanically. Muscles are tissues which can be easily developed and trained and this is why we need to take advantage of it. A couple of laps around the house is always a good way to start the exercise, if your dog can easily keep up with you at a normal pace, you can slowly up the speed and begin slow runs. You will have to take things very slowly though as to avoid any injuries and pain, always keep the leash on so that you will be able to support the dog during the entire exercise, just make sure that you will not drag the canine.

Hydrotherapy or swimming is also very beneficial for a lot of reasons, while walking will help strengthen muscles more so because of gravity, swimming will eliminate the downward pull of gravity and it can help your dog exercise without putting him or her in too much pain. Hydrotherapy exercises have actually been used for centuries and they are known to speed up the recovery process after surgical procedures and also slow down progressive diseases. Diseases such as DM which affects the spinal cord as well as the dog’s motor skills can be problematic and this is why allowing your dog to exercise in water is beneficial since it provides support while allowing your dog to carry on with the exercise and allow muscle and nerve regeneration to take place.

Exercises can be really hard to accomplish for dogs with DM, seeing your veterinarian and asking for professional help is always recommended before you try either walking or swimming exercises. Degenerative conditions can make either normal weight bearing or hydrotherapy exercises difficult, pressure on the joints may even aggravate the dog’s health conditions and this is why care should always be observed in allowing your dog to do any of the exercises.
How to Exercise your Dogs

Starting the Walking and or Swimming Exercises
Walking exercises is crucial for your dog’s health and wellbeing, aside from maximizing the muscle tone of your dogs; it can also help maintain good circulation as well as your dog’s good conditioning. Though you may think that it walking exercises are easy enough to do, you need to consider the fact that doing it properly is the key. An alternating exercise regimen is one of the most effective ways to help your dog maintain mobility, it is not enough to have your dog run around, you need to have scheduled, regular and continuous exercises.

During the days when your dog is meant to rest, you should not allow the canine to do strenuous exercises and play, you may not necessarily keep the dog locked up but you should definitely allow the dog to rest and recuperate for fast muscle and nerve regeneration. During the exercise days, your dog for at least five to ten minutes, you will have to do this for at least two weeks until you can increase the length of the exercise time to as much as thirty minutes. The goal is to extend the length of time with at least thirty minutes of exercise plus another one hour of walking. Just in case your dog is feels weak or will exhibit joint or muscle pain, you can try to incorporate herbal supplements or prescribed medications to lessen the inflammation. With the help of walking or swimming, a lot of dogs with DM have remained mobile, functional and happy.

Uphill Climbs
We all know that in DM, the hind quarters are the first part of the dog to be attacked, this is why making sure that you will build up and put some time to concentrate on this are of your dog is very important. First of all, you need to make sure that your dog is able to do exercises and is mobile and strong enough to withstand a bit more strenuous activities, if your dog is up to the task, you can slowly take him for an uphill climb. Look for ramps or better yet, a naturally inclined area where your dog can slowly walk on. Though at first, if your dog is finding it very hard to walk, I may suggest that you talk a ramp instead so that your dog can immediately resume walking on level ground just in case.

If your dog’s paws will start to show signs of wear, especially on the hind paws, you may start to put on dog booties so that the nails and the pads will be protected. Never exercise your dog up to the point of exhaustion, bleeding on the nails may be a sign that you are exercising your dog too much and you should stop and rest for the day.
An uphill climb is a great way to strengthen the muscles on your dog’s hind quarters and hind legs, this will allow your dog to regain the strength in the tissues and it may even strengthen the joints too. Always keep in mind to allow your dog to have ample rest and nutrition afterwards.

Lateral Stabilization
Lateral stabilization exercises your dog’s hips, this is an exercise which can help your dog strengthen his or her hip control, this exercise will allow your dog to gain much needed support especially when your dog will walk uphill or stand on both hind legs. The exercise is done by first positioning both your dog’s legs at least a hip’s width apart, after which you lightly push the hips to the right side up to where your dog can resist, hold for three seconds, pause, then repeat ten times. After the right hip push, you can also push gently towards the left and do the same procedure on the left side.
Alternate Leg Weight Bearing Exercise
This exercise is done in order to improve your dog’s balance as well as improving your dog’s hind leg control. The exercise is done by picking up your dog’s right front paw and the left hind leg, hold this position for thirty seconds and allow your dog to feel the full weight of the body using only the two legs. Change legs and repeat the entire process five times, do this exercise with your dog daily and allow your dog to stand up or jump with the hind legs by giving your dog treats.

Sitting Exercise
As what the name implies, this exercise is done by gently forcing your dog to sit but pushing down on the hips, and then gently pulling the hips back again to a standing position. This exercise will also strengthen your dog’s hips and will assist him greatly in the long run for as long as you will continue to do the exercise on a daily basis.

Swimming
Swimming is undoubtedly one of the most loved exercises for dogs; swimming is an incredibly fun way for your dog to exercise the entire part of the body. First of all, swimming should be made into a family activity as much as possible, this will increase the fun factor out of the exercise and it will encourage your dog to interact, swim and exercise more. Introduce your dog to the entry and exit area of the pool so that the dog can get out of the pool with ease. Make sure that you will put on a vest and a loose collar so that the dog will be able to swim with as much ease as possible.
Though you may have to check with your veterinarian first before taking your dog for a swim, swimming is actually a good way to condition your dog, it will help the canine lose weight and it will also serve as a form of physical therapy for dogs with degenerative myelopathy. Some dogs may need help with swimming and this is why putting on a buckle collar and a doggie life vest is very important, in teaching and guiding your dog during swimming, watch out for possible injuries such as claw marks and wear protective attire too.
Though considered by many as natural swimmers, dogs may need help and coaxing before they will go for a swim on their own, you will have to utilize toys to encourage your dog and you may also have to make sure that your dogs are praised and rewarded for their efforts. Make sure that your dogs will have a great swimming experience so that the canine will be glad to do it all over again the next time. If your dog is having trouble because of DM, you may use a longer life vest, one that can also allow the hind quarters to float in order to assist your dog properly. You will need to have a lot of patience in doing this with your dog and you will have to make sure that your dog will not overdo it as well.

Exercise Reminders
Always get an opinion from a veterinarian if and when you plan to use exercise to treat degenerative myelopathy.
Never let your dog walk, run or swim too much.
Never leave your dog unattended on the pool or in a natural body of water, a lot of accidents can happen and you may end up having your dog go through dangerous
scenarios such as drowning or straining the body because of too much exercise caused by losing the life vest or not being able to find the exit area.

- You will also have to make sure that you will also wear the proper swimming gear such as life vests and long sleeved swimming suits. This is to prevent any accidents to happen and also to make sure that you will also be safe.

- Always introduce your dog to the entry or exit area where the ladder is found or where the dog can easily go in and out of the water.

- Floating toys as well as life vests are very important and you will have to secure them to aid the dog with the entire swimming exercise.

- The swimming exercise should be made short and the exercise needs to be timed and scheduled properly, you may increase the length of the exercise only when your dog can adjust accordingly.

- Letting your dog swim with the other dogs can help develop the canine’s swimming skills and as such can help the dog train and mobilize the muscles as well.

- Your dog may ingest a lot of water and you might want your dogs to relieve themselves first before you will continue with any other activities.

- Every time your dog will exercise it is always best to do some stretching first, slowly stretch your dog’s legs to improve the circulation before you go for long walks and runs. Massaging your dog’s legs will also help the muscles warm up and loosen up your dog before a rigorous activity.

- Never support your dog by lifting it up by its tail, this is very dangerous and it can harm your dog especially dogs with DM.

### Additional Treatments for Dogs with Degenerative Myelopathy

Degenerative myelopathy is such a puzzling disease, there are a lot of clinical studies which conclude that even until now there is no clear and definitive treatment for degenerative myelopathy with regards to canines. Even if there has been a lot of theories and research about this disease, the treatment for degenerative myelopathy still remains as elusive as ever. Approaches for dogs with DM have been limited to exercise, nutrition, supplementation and the use of preventive medications.

Since treatment options are limited, the only option left for healthy dogs is the prevention of the disease by optimizing their diet, exercise and supplementation beforehand, but for dogs that already have degenerative myelopathy, the only option left is to try to stop the progression of the disease at its track or at the very least slow down its attack. Early diagnosis, needless to say, is crucial, but because diagnosis also vague, it can be very hard to keep track of the onset or the advancement of DM in many dog breeds.

In many cases, the dogs which are no longer able to walk with their hind legs will require the aid of lifts and wheel chairs and at times, the owner will just have to spend as much time with the dog as possible making sure that the dog will be as happy as can be while waiting out the remaining years left. Many dog owners who have been left to face this depressing reality can opt
to wait for a miracle or on the other hand, try alternative options and hope that their dogs will experience the same positive outcomes that a lot of dog owners who opted for these options have experienced.

As of today, a lot of conventional medicine practitioners will advise the use of neuro-protectant medications in order to at least double the life expectancy of dogs with DM, but this too is inconclusive and your dog may or may not get be able to have the benefits with the use of the medication. And much like this scenario, some dogs which have gone through alternative treatments have shown promising results with regards to slowing down the progression of the disease while in some cases, the disease was still able to progress and develop.

Nevertheless, any options that can be used against DM should not be taken for granted, there are a lot of people who have questioned the use of alternative treatments but for sure, there are also a million more people who would rather have you try them instead of do nothing and wait until the worst comes.

At this point, you need to understand that you are against a lot of odds, but this is exactly why you need to open your mind and try to figure out what other options are still available. It’s in going back and forth and constantly coming to a dead end that you will realize that if you want to save the life of your dog, you are going to have to stop wasting your dog’s precious time and start opting for a less conventional but more homeopathic approach against degenerative myelopathy.

There are new treatment methods for DM, they have been in development in the last few years and many of them have been brought forth because of new research. Simply put, to say that they are unconventional may come as an understatement, but as strange or unrealistic as they may seem to be, it would be a lot more unrealistic for you to conclude first before you have tried the alternative option.
Supportive Measures

Supportive measures are basically approaches which may help slow down the progression of the disease. There are a lot of supportive measures which can be used to help dogs with degenerative myelopathy, these measures are not actually part of a proven treatment but they are just used to supplement the various approaches which are utilized for the disease. Some supportive measures may sometimes be completely unrelated to the disease itself, but you need to keep in mind that in the long run, these supportive measures will actually benefit your dog as it can help improve your dog’s health especially as your dog goes through various treatments such as exercises and other physiotherapy procedures. These measures can not only help your dog, these may very well give your dog a chance to avail of various approaches which may help your dog improve his or her chances against DM. Some supportive measures are as follows:

- **Dietary cartilage**
  In many cases, the intake of dietary cartilage is needed for degenerative joint diseases especially when there is the presence of arthritis. Glycosaminoglycans and chondroitin sulfate are the most common forms of dietary cartilage and these substances are known to reduce pain and inflammation from osteoarthritis, even assisting in the healing process. Glucosamine is a natural substance found in natural dietary sources such as chicken bones as well as in many other edible animal bones though some have attested to shark cartilage being a better source. Glucosamine plays an important role in the maintenance of joint cartilage, both Glucosamine and Chondroitin are safe to use supplements that can effectively treat arthritis and osteoarthritis pain, and are important for maintaining joint tissue health and repair. In degenerative myelopathy, it is important since it can help increase the range of motion on the limbs and it can also help increase the lubrication in the canine’s joints and cartilages. In a way, since dogs with DM will have a hard time moving the hind limbs, dietary cartilage will help reduce any inflammations and it will then allow your dog to go through exercise treatments and massage options.

- **Stress Reduction**
  Stress reduction is very important when it comes to preventing DM, there are studies which shows that dogs who are prone to have increased levels of stress will end up having a marked increase in the progression of the disease. Minor surgeries and doing any dental work on the dogs can increase their stress levels and it can also hasten the development of the disease. Though the onset and etiology of the disease remains to be unclear, it is a well-known fact that DM can develop at different rates and that stress is a can basically be considered as a catalyst which can speed up the effects that the disease causes. Stress reduction is clearly significant, dog owners need to understand that stress, once it takes place is no longer reversible, most especially when it is surgical stress.

- **Physical aids**
  The use of physical aids is another supportive measure that dog owners must consider, in severe cases, the dogs may need to have wheel chairs and lifts which are customized specifically to your dog’s needs, in the early stages of the disease however, the dogs may only require a bottoms-up leash or a walkabout rear harness especially if the canine can still walk. A belly sling can also help a lot since it can allow the handler to support the dog during walks or exercises.
Physical aids are considered as part of the supportive measures simply because without them, your dog may end up not being able to exercise or take part in any positive activities. Even if the DM ridden dog is no longer able to mobilize the hind legs, the disease can spread towards the front limbs and without any physical aids this can happen hastily. Allowing your dog to exercise and have a happy semblance can effectively increase his or her survival time; not allowing your dog on the other hand will be very detrimental to its health and will hasten the progression of DM and decrease your dog’s lifespan.

Natural Remedies for Degenerative Myelopathy

Herbs are known to have the capability to treat various health issues in man, for centuries, nature has been used as man’s most convenient pharmacy and now even for the treatment of dogs, there are useful herbs and natural remedies which can be used. Some of these natural remedies are readily available, but in some cases, opting for herbal supplements may be a better alternative as it can contain a wide range of ingredients which is very useful in treating various diseases. There are a lot of natural remedies or products which contains natural ingredients which have been proven to be very effective against DM, products such as Sanus-Biotex are truly amazing treatments which have been proven to effectively show visible signs even in as little as 14 days. Not only will products such as Sanus-Biotex contain natural ingredients, the ingredients that it can be used to boost your dog’s immune system, lower your dog’s stress levels and it can also be used to effectively slow down and treat DM. Some of the natural remedies that can be very useful are as follows:

Ginko leaves

Ginko leaves from ginkgo biloba can be used to increase the flow of blood towards the brain, the leaves can be made into a tonic but you may use herbal preparations in capsules instead so you can easily give it to your dog. Ginkgo is used in many herbal supplements nowadays and is safe for dogs with DM, each herbal product may contain varying amounts of gingkocides, the active ingredient in ginkgo leaves and different manufacturers may recommend that your dog will take in different amounts per day. Ginko leaves may not treat DM per se, but it can be used to slow down the effects of DM.
Ginseng
Both oriental and American ginseng have a lot of ginsenosides, ginsenosides are the active compounds found in the ginseng herb which can help your dog resist stress and even help maintain muscle tone, hormonal balance and metabolism. Acting on the pituitary and adrenal axis, it can really help your dog fight against DM. Ginseng is found in many herbal supplements for DM but is generally recommended for use by Male dogs. In young pups, it may not be that beneficial, but in older dogs, it can help give them a boost in vitality.

Dong quai
This Chinese herb is the female counterpart of the ginseng; this herb is actually known as the “female ginseng”. Generally used by human females to boost the reproductive system, with the help of this supplemental herb, female dogs will be made more energetic and active.

Green tea
Green tea contains a lot of antioxidants, for humans, it has been known to help prevent a lot of diseases especially with regards to cardiovascular ailments. In dogs, it is known to lower cholesterol levels and its theophylline content can help boost your dog’s energy levels in preparation for aerobic exercises and physiotherapy.

Grape seed extract
Grape seed extract also contains a lot of antioxidants which can help remove harmful free radicals on the cells and it can also help protect your dog from developing chronic illnesses and even health complications. In dogs with DM, grape seed extract can help ward off other diseases which may develop and it can help your dog fight on and not be blindsided by other health issues.

Hydergine
Hydergine is actually a prescription drug which is derived from a natural fungus called ergot, this is a particularly interesting drug since it is known to aid in the regeneration of nerve cells and fibers, and this phenomenon alone is very beneficial against DM. Hydergine is safe to use and is not toxic to dogs, however, some dogs will have gastrointestinal irritations and even diarrhea upon initial use of the drug.
The only downside to the use of hydergine is the fact that it is quite expensive and maintaining its use for months or years can be too much. You can however, start to give small doses to your dog until the canine will be able to adjust and then look for pharmaceutical companies which can sell it for less. The use of hydergine is solely based upon need and you will have to get a prescription from your veterinarian first.

Siberian ginseng
A cousin to the real ginseng, the Siberian ginseng has adaptogenic properties which protects your dog from stress. It will help reduce physiologic response to stress and as such is extremely important in making sure that your dog’s DM will develop as slowly as possible and will not be aggravated. Found mainly in Siberia and in the northern parts of China, this herb is found in many canine herbal supplements because it is also known to increase physical performance as well as improve your dog’s immune system.
Bromelain and Curcumin
Bromelain is an extract which can be found in the stems of pineapples, this substance is quite unique and there is actually no western counterpart to its properties. Bromelain can actually help decrease circulating immune-complexes and because in DM, immune damage is likely caused by immune complexes, bromelain can be used to help control the progression of the disease. Curcumin on the other hand can be found in the turmeric plant and it is actually the source of its yellow pigment. Curcumin is a very potent anti-inflammatory agent, but more so, it actually has a synergistic effect with bromelain where they can actually assist in the absorption of the other within the digestive system and this is why it is highly recommended to take both together for optimum results.

Feverfew
Feverfew is known as a natural NSAID except for one fascinating thing, it does not cause any of the side effects that most prescription drugs have. Typically used by dogs that have problems with arthritis or those who experience a lot of pain, feverfew can be used to treat inflammation and discomfort. For dogs with DM, it can help relieve any discomfort and any inflammations especially when your dog also has arthritis. Pain in DM is not usually present because there is a loss of nerve function.

Massage Therapy for your Dog
Massaging your dog is very important; though a lot of people may find it hard to believe the fact dogs love to be massaged too and that a massage can be a useful treatment approach, you just cannot deny the fact that something as simple as a massage can actually be very beneficial for the health of an animal. A lot of western medical practitioners do not really proponents of the use of alternative techniques, and more so when it comes to using these techniques to help treat animals.

For centuries, animals were more than just house hold or farm characters, they were considered as life lines in many communities and this is why all of them had to be in perfect condition. Though not many of us have dogs to do actual work, we still nonetheless want our canine
buddies to be in the best of health and fortunately, the same methods which were used in the past are still applicable and effective today. Massage techniques have been used in Asia since ancient times; in fact, there are Egyptian hieroglyphics that tell of the use of massage techniques for healing work animals, and as massage has been incorporated in many treatments to help heal our body, it is now also being utilized for the treatment of animal diseases. There are a lot of benefits with the use of massage; some of these are:

- Relief from muscle aches
- Relief from stress
- Increase in immune system response
- Produces a calming effect
- Increase in blood circulation
- Promotes healing
- Reduces pain
- Improves mobility

These are just some of the benefits of animal massage, with regards to dogs with degenerative myelopathy, massage can help slow down DM by helping them calm down and get rid of stress, massage therapy can also help improve mobility allowing them to do more exercises and move their limbs in order to maintain function and survival.

### Daily Massage Routine

A massage can actually lower the blood pressure and the stress level of both the giver and the receiver, this is only one of the things that a massage can do for you and even for your dog. With that and with all the benefits in mind, there is actually no reason for you not to give your dog a bit of love, attention and of course, a tender and loving massage. A routine massage can be accomplished in as quickly as ten minutes; a routine massage can also be considered as something more like a bonding time between you and your canine buddy. You do not have to get training or whatsoever to do it; in fact, you will just have to touch the various muscles and parts of your dog using your palms. But more than just simple touching, you will have to put a little pressure along the layers of muscles and bones on your dog’s body. It is not just petting your dog and making your dog feel loved and cared for, the daily massage routine can also help you know more about your dog and your dog’s body, in the long run, you may begin to take note of the texture of your dog’s coat, the thickness of the layers and even the contour of the body and any changes will automatically warn you of possible health issues.

### Relaxing Massage

The relaxing massage is aimed at making your dog feel a whole lot better if and when he or she begins to feel stress, fear and anxiety. This simple massage is done by lightly placing your and on the back of the neck of your dog, you will then gently stroke the dog along the spine from the back of the head all the way down the tail. This massage will help your dog relax since it is a form of petting; this is very effective especially when your dog has just recently been alarmed. You will have to do the massage with the use of long sweeping motions, do it repeatedly and end the massage by resting your hand on the base of your dog’s pelvis while the other hand rests on the back of the neck, placing your hands on these areas will help your dog relax all the more and
will help your dog to recover from the stress or the anxiety of going through vaccinations and other ordeals.

 أفريقيا Hot-up Massage
A warm up massage is a great massage which can be used for dogs who love to play a lot or those who will be undergoing physiotherapies. Active dogs or dogs who will be going through exercise regimens will have to warm up their muscles to avoid injuries much like humans need to do stretching and warm up before playing sports. The first step to this massage is to do petting strokes all over your dog’s body; you need to do long strokes for several minutes. Afterwards, do brisk rubs on the large muscle groups such as the shoulders and back, the neck, the buttocks and the thighs. Gentle squeezes on the muscles will do, afterwards, wrap your hand on the legs and squeeze for a moment while slowly releasing your grip. You will then end the massage with another round of petting strokes to fully activate the nerves and the muscles.

 أفريقيا Soreness Relief Massage
After long hours of play or after exercise, your dog may feel weak and sore after a day or two, limping usually indicates that something might have gone wrong with your dog’s muscles. Without the help of a soothing massage, your dog’s muscles will not be able to recover properly and your dog will not be able to walk without experiencing pain. Muscle soreness is not only experienced by dogs which are too active, even aging dogs will feel pain along their joints too and this type of massage may help your dog recover faster from any injuries. Start by gently stroking the area and slowly warming up the joints and the muscles involved. Afterwards, you will have to put your hand or both hands if you have a big dog over the area and the slowly count while gently pushing downwards and compressing the area. Try to establish a rhythm while performing the massage, the compressing action will move fluids surrounding the muscles and joints and will take the tension and soreness away from the area. Finish the exercise again with long strokes on the coat to soothe the nerves and the muscles.

Massage Reminders

Though a massage can do wonders for your dog, care must always be given since it may as well make things worse for your dog if and when you are not careful enough. Your touch can heal, but there are instances when your dog will only feel a lot of pain when you apply even the lightest pressure. As a precaution, try your best to consult with your veterinarian first before you massage dogs who may have specific needs. Here are some reminders that you need to remember:

 أفريقيا Do not massage dogs that have cancer
 أفريقيا Do not massage dogs which have fractures
 أفريقيا Do not massage dogs that have Arthritis
 أفريقيا Do not massage dogs that have skin conditions
 أفريقيا Do not massage areas which are swollen and tender
 أفريقيا Be careful not to hurt your dog during the massage
Canine Hydrotherapy

Canine hydrotherapy is a form of hydrotherapy designed specifically for canines, this kind of therapy is directed to help dogs speed up their recovery from certain kinds of operations and it is also designed to help keep your dog fit and in top condition prior to getting a surgery. For dogs with DM, canine hydrotherapy is beneficial since it can also be designed to treat dogs with chronic conditions. Aside from allowing your dog to exercise the heart as well as the lungs, it is also an exercise without stress since your dog will not be exercising on hard ground and your dog will not have to carry the full weight of the body.

Hydrotherapy is a very good exercise for dogs with spine problems since it is done in a very controlled way, the dog’s muscles are working and being utilized without the added resistance and this will help a lot because it will help your dog stay mobilized despite physical impairment. Hydrotherapy is actually recommended for a wide number of diseases both chronic and acute, when referring to a part of the dog’s body, it is usually targeted to towards the leg muscles, the joints and the paws to help minimize inflammation and increase circulation.

There are instances when your dog may not like going through hydrotherapy procedures because of fear, in this instance, you might want to consider putting your dog under a gentle stream of water first or putting a warm or cold compress on the area will also help your dog relax. Depending on the nature of the injury, your veterinarian may recommend either warm or cold water to help treat your dog’s health condition.

There are a lot of different facilities which may be used in hydrotherapy, looking for a canine rehabilitation center is one of the best ways to make sure that your dog will be able to avail them. For chronic diseases, your dog may need delicate hydrotherapy procedures but for other conditions, your dog may need to use whirlpool baths, full sized pools and etc. Hydrotherapy can help rehabilitate the affected area of your dog’s body, with the help of professional therapists, your dog can easily recover from various health conditions and it can help maintain mobility and increase survivability at the same time.

The veterinarian can also help train dog owners how to do various hydrotherapy techniques on their own; this is done if and when the owner has access to a pool or other needed facilities. Owners are usually asked to join therapy sessions with their dogs but home hydrotherapy is prohibited unless the owner is personally trained by professional therapists to avoid any complications.

In hydrotherapy, the principles and properties of water should always be considered, cohesion, viscosity, and even hydrostatic pressure must be taken into account in order to provide the optimum conditions. Knowing how the water will affect the dog’s posture, and mobility will be crucial each and every time a hydrotherapy program is implemented.

Benefits of Hydrotherapy
There are a lot of known benefits of hydrotherapy; it has been used for centuries to treat various animals with various health conditions and it is still being used today in order to help strengthen and heal your dog. Though it does eliminate having to go through exercises while letting your dog carry their full weight and while it also does eliminate a lot of stress which is usually present in any other exercise, you have to keep in mind that the effectiveness of the exercise is not diminished, this is because water does have resistance and this is what can help your dog build muscles and recover the full use of his or her limbs.

First of all, your dog’s skin will benefit from hydrotherapy, the treatment can help increase circulation towards the integumentary system and it will also help improve your dog’s touch receptors aside from helping improve your dog’s coat. Since water’s buoyancy helps support your dog’s weight, hydrotherapy can increase muscle relaxation and reduce pain and spasms, moving in water presents a resistance which is almost twenty times stronger than air and a simple 5-minute therapy can be considered as something close to a 5-mile run minus the pain and stress. Stress is a huge factor in Degenerative myelopathy and this is why it has to be addressed as soon as possible, even in humans, many of us want a day at the beach or a long swim after a week of work in order to get rid of stress and this is exactly what hydrotherapy can also do for your dogs. Water can help remove anxiety and it can soothe your dog’s nerves, hydrotherapy can also improve your dog’s receptors and increase touch and sensation channels. The water temperature can also improve blood circulation, warm water helps expand and dilate your dog’s veins and it will help improve the transport of nutrients and oxygen and also hastens the removal of toxins. Water also has buoyancy and a bit of pressure and this is what will help compress muscle tissues, increase blood flow in and out the limbs and also stimulate cellular respiration.

Hydrotherapy can also help improve metabolic functions and it can also help improve lymphatic function which will in turn improve the immune system as well as alleviate inflammation. The depth of respiration is increased and the transport of oxygen and elimination of carbon dioxide is also increased. Nutrients are transported towards the cells faster and toxins as well as other eliminates are excreted through the digestive system and the kidneys faster as well.

Other Benefits of canine hydrotherapy include:
- Pre and post op care for muscle building
- Relief from pain, swelling and stiffness
- Increase in the range of motion in joints, muscles and bones
- Increases mobility
- Cardiovascular improvement
- Weight loss and muscle strengthening
- Mental stimulation

Canine conditions that benefit from hydrotherapy:
- Chronic and Acute diseases
- Arthritis
- Dysplasia
- Cruciate ligament injuries
- Post-operative recovery
- Pre-operative conditioning
- For the recovery from injuries - fractures, soft tissue
- Obesity
- Spinal injuries
- Degenerative Myelopathy
- Osteochondritis
- Anxiety and Stress

**Hydro-Treadmill Therapy**

Amongst the many conventional treatments for DM, physiotherapy has been known to prolong the length of time that your dog will be able to use his or her limbs and also increase the length of survival time. Basically, hydro-treadmill therapy allows your dog to stay active and mobile while exercising, hydro-treadmill therapy is the use of an underwater treadmill which helps with
the treatment of dogs with degenerative myelopathy by strengthening muscles as well as by re-
educating the dog’s hind muscles.

Hydro-Treadmill therapy or canine aquatic treadmill therapy is a ground breaking rehabilitation program that can help a lot of dogs who are suffering from orthopedic or neurological diseases, in many instances, a hydrotherapy program will require an in-depth analysis of the water’s cohesion and viscosity and also with regards to how the dog is able to react to the treatment and with the help of hydro-treadmill therapy, the water can be controlled so as to target specific results for your dog.

It has been noted that dogs which will not use a limb on land due to certain conditions will tend to use it and mobilize it under water; this is why one of the main uses for underwater treadmill therapy is for early return to function aside from improving the strength of various muscle groups. A lot of post-surgery canines as well as those who are suffering from degenerative diseases suffer from muscle atrophy and allowing them to take hydro-treadmill therapy at least once a week can help them regain strength and mobility. Increasing the frequency of the program will also speed up the recovery process but rest days should be implemented nonetheless. In all hydro-treadmill therapy programs, the dog is introduced into the therapy in a very controlled manner, as the dog adjusts to the therapy and shows signs of improvement, the therapist may also adjust the level of intensity accordingly. This kind of approach is also done in combination with other forms of treatment such as massage and other hydrotherapy procedures.

**Acupuncture Therapy**

Acupuncture is an ancient form of healing treatment which is done by the manipulation and insertion of solids, typically long and thin needles. This form of alternative medicine, originating from traditional Chinese medicine and typically performed all over the world nowadays, abide by the premise that our body functions through chi or qi, an energy-like entity. An imbalance in the flow of energy can and will lead to diseases and this is why acupuncture is performed in order to correct the imbalance and redirect the flow of energy towards the right channel through the stimulation of meridians found in acupuncture points.

With regards to dogs with degenerative myelopathy, acupuncture is said to be palliative especially with regular treatment, there are dog owners who have indicated that their dogs have been able to regain a certain percentage of their mobility after acupuncture therapy, the effect would usually last for a couple of days and would disappear after they stopped giving their canine acupuncture treatments.

Acupuncture is given high credibility when it comes to the treatment of degenerative diseases especially ones which involve the spine, the theory of having imbalances which block the normal flow of energy within your body is all too real an interpretation with regards to DM, this is because in DM, nerve signals from the spinal cord have been somewhat “blocked” especially during ataxia and the flow of signals need to be corrected in order to regain mobility. As mentioned earlier, exercise is very important and without allowing your dog to regain mobility and letting your dog do even the slightest form of exercise, the progression of the disease will not slow down.

Acupuncture is a well-established and vital part of Eastern medicine, it has been in use for more than a millennia and now it has earned the respect of the west in the treatment of their own health issues and even for the treatment of the health issues of their animals. Nowadays, acupuncture
has garnered a high following from western dog owners who are looking for less conventional treatments for degenerative myelopathy. Since we all know that degenerative myelopathy begins with ataxia simply because the disease affects the spinal cord first, acupuncture for the treatment of DM is carried out by inserting long, hair-thin needles at the various pressure points within the dog’s spinal column. Energy is then channeled through stimulation towards the needles located at the pressure points. The energy that is being directed towards the key points will then remove the blockages of the normal flow of energy within your dog’s body.

In theory, acupuncture treatments for degenerative myelopathy should clear the blocked pathways within the spinal column caused by the disease and in-turn relieve some, if not all of the most common symptoms of the disease. Amazingly, there have been numerous reports with regards to the success of this kind of acupuncture treatment. Many of our clients can attest to the fact that the acupuncture treatment has made remarkable improvement in their dogs with degenerative myelopathy. Continued treatment however, is a must and routine visits on a weekly basis are necessary in order to get the best results.

In our experience, allowing your dog to go through acupuncture therapy, together with the continued use of Sanus-Biotex, will give your dog as much as 68% success rate in relieving the symptoms. This rate should not be taken lightly as it may eventually be the key to giving proper relief to your ailing canine. For more information on Sanus-Biotex, please refer to succeeding topics below.

**Pulsed Signal Therapy**

Pulsed signal therapy is a breakthrough therapy which is now being utilized for canines with degenerative diseases, first used amongst European medical practitioners for the treatment of osteoarthritis, arthritis, tendon and ligament injuries and other related injuries, it is now being utilized for the treatment of various canine diseases. The principle behind this therapy lies behind the belief that each joint has an electrical field that promotes the continual regeneration of chondrocytes or cartilage cells and Fibroblasts or connective tissue cells especially in cases of osteoarthritis and other joint related conditions. What PST does is that it pulses an electromagnetic field over an affected area, this field will allow the reconstruction of the electrical field thus restoring the natural regeneration capabilities of the cartilage and connective tissue even in the increased production of proteoglycans and collagen to aid in the repair of cartilage defects.

The great thing about PST is that it is a non-invasive therapy and it can take place without causing any stress, the dog can just stay down calmly inside the machine. There have been remarkable results seen in various canine case studies. PST can be done as part of DM treatment for up to several years and a lot of PST users may even say that the therapy can be used to replace the need for chronic medications. PST is also known to significantly reduce pain and also increase the mobility of your dog. PST claims to have a significant 70% improvement on their patients, some vets who have been able to recommend PST to their canine patients have seen as much as 80% improvement and some vets even say that its effects are almost miraculous. This is because it a significantly increase the range of motion in the limbs.
In theory, the treatment revolves around the belief that if a nerve disorder is present, it can ultimately be attributed to a disturbance in the surrounding electrical field. PST works by isolating these disturbances and then by repairing the affected area by stimulating the surrounding healthy nerves and increasing a dog’s natural neuro-regeneration abilities. PST is more commonly used in Europe, and it has yet to get an approval by the FDA for use in the United States. However, it may be something that you may want to keep your eyes on as it might be approved in the near future.

Sanus–Biotex

First of all, the driving force for this humble product was a family dog, a seven year old German shepherd named “Titus” diagnosed with degenerative myelopathy towards the end of 2005. And like many dog owners whose beloved canines have been diagnosed with the disease, after spending a ton of money for ten-minute vet checkups, in the end I felt like me and my family were being taken advantage of, deep inside I knew that Titus was not getting any better no matter what I tried to do. And similar to many, I felt helpless, and not knowing what to do next made matters worse and finally, over the next few months we saw Titus gradually falling beyond our reach and finally falling victim to the disease.

That feeling of not being able to do anything had clearly imprinted upon me, that devastating feeling sparked a fire inside me and I became determined to looking for the answers to the questions which kept lurking on my mind and since then, I dedicated myself to finding real help for dogs which are suffering from various canine diseases. I wanted to find a firm and solid remedy and I wanted to do it for Titus, for me and my family and I wanted to do it so that no other family would have to sit back, spend thousands of dollars for nothing, and still, become a witness to the effects of not only degenerative myelopathy, but other diseases as well. After years of hard work, after all the time I have spent in researching and development, and finally three years later, and the thousands of hours of research by some of the world’s best veterinarians, I am more than happy to present the absolute corner stone of our product line, Sanus-Biotex.

Sanus-Biotex is the most successful degenerative myelopathy to date, and you don’t have to take my word for it, dog owners who have given Sanus-Biotex can attest to how effective our product is especially when it is given to complement your dog’s other treatments. I personally, along with every person in the Pet Harmonics Co., family are deeply touched each and every time someone goes out of their way to tell us how much they appreciate what Sanus-Biotex has done for their dog.

So what does make Sanus-Biotex very effective? First of all, Sanus-Biotex is not a product which is mass produced much like many other DM supplements; in fact, Sanus-Biotex is specifically customized for each and every dog. Amazingly, we have specifically designed Sanus-Biotex as a “handmade” formula tailored to your very own dog’s needs; each bottle is basically different from the other because we adjust the proportion of each ingredient as well as the dosage in order to optimize the product that you buy.
14 reasons why Sanus-Biotex is the ultimate formula for Degenerative Myelopathy:

- Every single bottle of Sanus-Biotex is 100% customized, formulated and blended by hand for your dog.
- Visible progress in as little as 14 days but please note, (60+) day programs are always recommended for long term success.
- Helps revitalize and nourish the muscles throughout your dog’s body while improving blood flow from the hind-legs to the heart.
- Have no adverse side effects. It is a highly Potent Formula found in every bottle and each one consists of the Highest Grade Ingredients you can buy.
- 100% Guaranteed to subside hind-quarter inflammation which occurs all too often leading to the extreme “flare-ups” associated with Degenerative Myelopathy.
- As an added benefit, Sanus-Biotex also helps to improve your dog’s overall digestion and gastrointestinal functions.
- Key ingredients found in Sanus-Biotex also help to revitalize your dog helping to restore youthful behavior.
- The ingredients found in Sanus-Biotex have been used and proven to work for thousands of years.
- Sanus-Biotex helps restore degenerated joints and connective tissue preventing muscle atrophy typically caused by degenerative myelopathy.
- Sanus-Biotex, replaces a number of potentially harmful and much less effective treatments including steroids.
- Degenerative Myelopathy is a confusing and scary disease for all dogs but Sanus-Biotex helps ease your dog’s stress, in-turn, improving their attitude and giving you less to worry about.
- Treating Degenerative Myelopathy using Sanus-Biotex is easy, all you have to do is to simply sprinkle on your dog’s food daily.
- Sanus-Biotex works to boost your dog’s immune system functions giving your dog the ultimate protection against other less serious infections!
- Ultimately, Sanus-Biotex saves you money with less veterinary appointments and even comes with a 100% No-Questions Asked Satisfaction Guarantee!

Sanus-Biotex Details:

Servings per container...40-45   Suggested serving........1/4- to 1/2 teaspoon
Serving size............1/2 to 1 teaspoon/day   twice/day
Dosage: Different for Every Dog - Not Standardized

Ingredient List:

**Lecithin Powder (Soy)**
- 1 teaspoon: 2489mg
- 1/2 tablespoon: 3734mg
- 1 tablespoon: 7468mg

**Vitamin E Tablets 1000mg/Tablet**

**Ascorbic Acid (Vitamin C)**
- 1/8 teaspoon: 529mg
- 1/4 teaspoon: 1058mg
- 1/2 teaspoon: 2117mg

**Coenzyme Q10 (COQ10) China**
- 1/32 teaspoon: 52mg
- 1/16 teaspoon: 105mg
- 1/8 teaspoon: 211mg

**Green Tea 50% Polyphenols**
- 1/16 teaspoon: 160mg
- 1/8 teaspoon: 320mg
- 1/4 teaspoon: 641mg

**Ginkgo Biloba Leaf Extract 24%**
- 1/16 teaspoon: 212mg
- 1/8 teaspoon: 425mg
- 1/4 teaspoon: 850mg

**Grape Seed Extract 95%**
- 1/64 teaspoon: 43mg
- 1/32 teaspoon: 86mg
- 1/16 teaspoon: 173mg

**Fish Oil Tablets**
Serving per container...min 40/per bottle
Suggested serving.........1 tablet/every other day
Contains (mg).............1000 mg per/tablet
* These measurements just give an estimate of weight per dosage and they are not exact amounts.
* Sometimes depending on humidity the powders may clump together. This does not affect Sanus-Biotex performance.
Sanus-Biotex also includes a propriety blend of natural vitamins and minerals to help with absorption.

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**We need you to spread the word! There is still HOPE!**

There are literally thousands of people who are in the exact same position you are in, and the wonderful fact is, a lot of them who were able to use our product were able to turn back or at least slow down the effects of degenerative myelopathy. A lot of pet owners have gone out of their way to express their appreciation to Pet Harmonics Co., and Sanus-Biotex as well as everyone here at the Pet Harmonics Co. family are always deeply touched and extremely happy that we are once again able to provide the best treatment there is for their dogs.

This is why we at Pet Harmonics Co., are dedicated to bringing you the very best in all natural treatments and supplements from around the world. Every product we distribute is based on solid, scientific research and is subjected to extensive testing to ensure maximum freshness, quality, and purity. All are manufactured under the strictest guidelines and made according to pharmaceutical G.M.P.’s or good manufacturing practices.

We live by these principles so that you can try our products with confidence! We are always here to help you in any way that we can and are positive that you and your dog will join thousands of others from around the world that rely on Sanus-Biotex and its proven ability to slow and even reverse the progression of degenerative myelopathy. That’s why we back our products with a 90-day Money back Guarantee, the very best in the industry, without hesitation! Your complete satisfaction and your dog’s good health is what my team strives for each day!
And with this in mind, here is where we will need your help. With your cooperation, thousands of dog owners will be able to know about this simple yet very effective product and possibly hundreds of thousands of loyal canines will be able to get the treatment and the prevention that they need to fight against Degenerative myelopathy and in order to lengthen their life span. I and my team would like to appeal to the dog enthusiast in you; we would like to ask for your help in spreading the word that there is still hope for dogs that have DM.

We would like to ask your permission to sell our product on your site, we want to reach out to as much dog owners as possible and the only way to help our precious canine buddies is to make sure that we work together hand in hand in the promotion of Sanus-Biotex. We really care and we truly want to help, and if you feel the same way too, we hope that you will lend us a hand in telling other dog enthusiasts about it. With heartfelt gratitude, we will continue to look forward to your much needed support.

How to Treat Dogs with DM

- First of all, you will have to make sure that your dog is truly suffering from Degenerative myelopathy. As what I have mentioned in previous topics, there are a lot of canine diseases which present similar symptoms and narrowing it down to make a clear diagnosis is simply a must. If your dog’s breed is at risk for DM, you may want to have your canine checked by a veterinarian using the Orthopedic Foundation for Animals DNA test. If your dog is already suffering from even the slightest symptoms such as an uneven wear and tear within your dog’s inner nails, ataxia or limited mobility, take your dog to the veterinarian as soon as possible.

- Your dog may need to go through various tests in order to rule out in any other diseases. Some tests may include Physical examination including history (susceptible breed included), Spinal Radiographs, Lumbar CSF, Electromyogram including a Spinal Evoked Potential test, and a Neurological examination looking for a non-localizing posterior paresis. Once confirmed, your veterinarian may recommend various medications and treatments which will have to be carefully followed.

- At this point, you may want to look into finding out how you can begin changing your dog’s diet regimen, try to get a closer look at what you have been feeding your dog and based on the topic about canine diet, try to see if your dog has been feeding on the best food sources. The next best thing to do is to carefully study other dietary options which you can use in order to optimize your dog’s nutrition. I would recommend that you follow the BARF diet by slowly transitioning your dog’s diet until your canine is properly adjusted to it. Optimize your canine’s diet with the use various food items and natural remedies.

- For supplementation, it would be best if you will be able to get your hands on a customized bottle of Sanus-Biotex as soon as possible. Contact us immediately at \-------- and we would be more than happy to accommodate to your needs and make for you an all-in-one formula that is specifically customized for your dog. We will be considering a lot of factors in making the formula and our goal at this point would be to prove to you that Sanus-Biotex can and will show a significant improvement with your dog’s health in as little as 30 days.

- Implement a feasible exercise routine for your dog; you need to make sure that your dog will be able to maintain mobility in order to also maintain survivability. With the information found in previous topics, you can make a workable exercise regimen which will slowly rebuild your dog’s muscle strength and leg mobility.

- Look for a treatment facility that can accommodate dogs with DM, your canine will have to undergo other treatments offered by professional therapists. Depending on the severity of the disease, you dog may have to go through
specialized treatments. Never disregard the opportunity to use alternative medicine, there are a lot of dog owners who have been amazed at how effective these approaches are especially when used together with Sanus-Biotex.

- Lastly, work with your veterinarian, always have your dog checked and make sure that you follow treatment guidelines carefully. Hopefully, your dog will not need physical aids, the most important thing to keep in mind however, is that your dog will need your love and attention more than ever and addressing this need may be the best way to help your dog fight against DM. Massage your dog from time to time and make sure that you will always be there to help your dog.

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