

## FACT SHEET

### Arthritis

*Arthritis is the name given for the inflammation of bones and joints, often causing swelling which results in painful joints and varying severity of lameness.*

#### Joints

All joints within the body are forced to undergo a lot of strain throughout a lifetime. Joints are usually classed within three different categories depending on their range of movement.

**Fibrous Joints:** These are mostly found between the bones and cartilage of the head and are held together by a dense connective tissue. Fibrous joints have no or very little movement between each bone or cartilage.

**Cartilaginous Joints:** These can be found between the right and left sides of the pelvic floor and between each individual vertebra. The connective medium is cartilage and there is a small to moderate amount of movement available.

**Synovial Joints:** These are joints within the shoulder, hip, elbow, wrist and knee. They are free moving joints, and as such, undergo the most strain resulting in injuries and often arthritis in later life.

These joints all consist of the same basic structure with the joint surface of each bone covered by a layer of cartilage providing a smooth friction free surface upon which movement can occur. Within the joint capsule lies a synovial membrane, the function of which is to produce a substance called synovial fluid. Synovial fluid is a viscous substance that protects the joints from concussion and heat whilst supplying nutrients to the cartilage layer. This type of joint is held together by very strong ligaments that help to stabilise the joint.

#### Signs and symptoms of arthritis

Signs of arthritis will vary from one individual to another depending on the severity of the problem. Arthritis is common in dogs, one of the reasons being, they are more prone to hereditary and congenital bone and joint conditions such as Hip Dysplasia, Perthes Disease and OCD, which all cause excess strain on joints resulting in early arthritic changes.

The most common early signs seen in a dog with arthritis are stiffness, particularly after a period of rest. Dogs may start to lag behind slightly on a walk, be slower at climbing up stairs. Signs are usually aggravated in conditions of extreme cold, drafts and damp.

When the symptoms are severe your pet will be very reluctant to move and will show signs of obvious lameness, including suffering from painful, swollen and heated joints.

#### Prevention

There are several measures, which can be taken to help prevent the onset of arthritis in susceptible animals.

A high quality natural diet should be fed to dogs, especially during pregnancy and the early growth stages of puppyhood. This is because the type and quality of diet fed in these stages has a direct link in the development and structure of the bones and joints. If a poor quality diet is fed, or a diet with insufficient levels of protein, the bone structure and joint development will directly suffer, with some cases resulting in a condition known as rickets. Naturediet Puppy/Junior is an excellent diet for a new puppy or a pregnant bitch. It is naturally meat based containing egg, moist but firm complete meal which is nutrient dense, containing all the essential vitamins and minerals required for development and growth.

Another important factor that should be understood is that excess weight will cause pressure on all bones and joints aggravating any arthritis present. It is important to keep an eye on your pet's weight, to watch that they are not putting on weight and becoming obese. A dog that is particularly obese and suffers from arthritis will one day be unable to stand up, as he will be in too much pain to carry his weight due to joint inflammation. If your dog is prone to putting on weight, or is already overweight, then he should be fed a diet that is lower in calories in order to prevent further weight gain. Naturediet Senior/Lite is a low calorie diet that can be fed as a maintenance diet to help prevent obesity, or alternatively, can be fed to a weight reduction programme. It is very important to be strict with a calorie controlled diet, and not to give tidbits. Weight loss with continued monitoring will help provide a better quality of life and will probably increase his life by years.

As mentioned earlier, hereditary disorders, e.g. hip dysplasia can aggravate and cause very early arthritic changes. For this reason it is very important not to breed from an animal with a hereditary joint disease link, as it is highly likely the problem will be passed on. There is a scheme set up by the British Veterinary Association for hip dysplasia in order to help advise owners on the condition of their dog's hips and whether it is advisable to breed. The hips are X-rayed by your veterinary surgeon and then sent for examination by a panel of vets. The hip joints are given a score, which enables them to compare with other dogs of the same breed. If the score is particularly high for the breed then it is advised not to breed. This advice should never be ignored as it is not only detrimental to the breed, but you will be responsible for bringing dogs into the world who will probably suffer a lot of unnecessary pain.

## Treatment

There are a number of different drugs available to help with the pain and discomfort that arthritis can bring. However, some of these drugs, particularly ones that are steroid based, can have long term side effects and should be avoided if at all possible.

As a natural treatment seaweed extract is added to all of the Naturediet product range and can relieve stiffness in the joints.

Vitamin C can be given as an extra supplement by adding fresh vegetables or fruit to your pet's meal. This is known to help with many different joint problems.

Stinging Nettles contained within homeopathic tablets are an excellent product to try. Nettles have a natural anti-inflammatory action helping to ease the inflammation, pain and stiffness of joints that occurs during arthritis, thus helping your pet to move freely again. Stinging nettles also contain high levels of organic calcium that is readily assimilated.

Garlic is beneficial to the body in many ways. It has been proven to have a positive effect on pain in joint and bone conditions, especially Rheumatism.

Aloe Vera contains natural anti-inflammatory properties, which relieves the pain that is present with arthritis.

Rhus Tox in homeopathic dilutions is particularly useful for arthritic pain that is worse on first movement, but then eases off after gentle movement. Also good for the effects of over-exertion as it has particular affinity with muscle and tendon tissue - both of which support joints.

Arnica is helpful where the joint-pain is traumatic in origin. It increases the oxygen supply to the area, and can be profoundly soothing. It is very good after an acute injury or after over-exertion in a chronic case.

Ruta Graveolens has particular affinity for ligament and joint problems. It is useful in joint trauma where the problem is bone or ligament based.

Bryonia has particular affinity for serous membranes - the linings of joint capsules. Bryonia is indicated for joint pain, which is worse with any movement.

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*We care what goes into our food, because you care what goes into your pet*

Recent research has shown that a naturally occurring substance called glucosamine sulphate may be of considerable help to arthritis patients. Glucosamine sulphate is a natural substance that forms the key building blocks for the major structural materials that make up joint cartilage. The linings of our joints and those of our pets are largely constructed of cartilage, where it performs a role as a tough load bearing, resilient and renewable material. Healthy cartilage is essential for strong and healthy joints. Glucosamine is derived from common simple sugars and the body does not normally need supplements of it. However, in arthritis the body is subject to an internal stress factor that seems to cause an accelerated breakdown of important components of joints. This can lead to a position in which the breakdown takes place faster than the body can replace it, resulting in erosion of joint materials. It appears that the body's ability to produce its own glucosamine sulphate has become limited at this time.

It has been found that supplementation with glucosamine sulphate, can help to produce new joint cartilage, arrest the erosion that is occurring and thus help preserve the joint's manoeuvrability.

Chondroitin Sulphate occurs naturally within the body as part of a large protein molecule. It is basically a lubricant and forms a cushion for the joints and also maintains cartilage tissue. As cartilage wears, chondroitin is also lost resulting in painful arthritic joints. Supplementation of chondroitin can help ease this associated pain. Many supplement forms of chondroitin are derived from shark cartilage, and as many shark species are under threat due to their medicinal uses it is worth looking for products originating from more sustainable sources.

## How can Naturediet help?

Naturediet recommends a natural approach to all health matters whenever possible. There are many natural alternatives to steroids that should be tried.

First, if your pet is overweight it is very important to feed a diet that is low in calories. Naturediet Senior/Lite can be fed to control your dog's weight, or as a weight reduction programme as mentioned earlier. Any further treatment will be almost entirely wasted if the pet does not also lose excess weight.

Naturediet Senior/Lite may also be fed to an older dog once an ideal weight has been achieved. This menu has been specifically developed for elderly dogs that may be suffering from arthritic conditions.

## Homeopathic and alternative remedies

If you would like to use homeopathic or alternative remedies on your dog it is advisable to seek the help and advice of a veterinary surgeon that has specialised in homeopathy. Whilst it is true that the wrong homeopathic remedies infrequently given will not do too much harm - if given for period of time it could well cause an aggravation of the symptoms and make diagnosis more difficult.

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