



# **JOINT PROBLEMS including arthritis**

## **FACT SHEET 14**

### **TYPES OF JOINT**

A connection between two or more pieces of bone is called a joint. Joints are classified into three different types:

- Immovable
- Partly movable
- Freely movable

This last class includes joints such as the hip, elbow, wrist and knee. All these joints have the same basic structure and are subject to a wide range of problems, including arthritis.

The joint surface of each bone is covered by a layer of cartilage, which protects the bone from concussion and provides a smooth surface for movement. Lubrication is provided by a viscous substance known as synovial fluid, which also supplies nutrients to the cartilage layer. This fluid is produced by the synovial membrane lining the joint capsule and the ligaments. Both of these are important structures which basically hold the joint or bones together.

Certain joints (including the knee, or stifle) contain other structures, such as cartilaginous discs or menisci to improve stability within the joint.

### **JOINT PROBLEMS**

Joints are subject to a wide variety of conditions, which can basically be classified as follows:

- Congenital problems, including some types of luxation or subluxation
- Developmental disorders, including osteochondrosis (OCD), Perthes disease and hip dysplasia
- Dietary induced conditions, including hypervitaminosis A (seen in cats) and rickets
- Degenerative arthritis, which can arise from:
  - Injury to bone, ligaments or tendons
  - Ageing, which leads to wear and tear on structures such as ligaments and cartilage
- Inflammatory arthritis, which can arise from:
  - Bacterial or viral infections
  - Auto-immune disease, where the body's own defence mechanism leads to joint damage

## **SIGNS AND SYMPTOMS**

The symptoms will vary from animal to animal depending on the severity and type of the problem. At first the signs may be hard to detect, but the most common symptoms include:

- Stiffness, particularly evident after a period of rest
- Stretching, especially after rest
- Swollen, painful joints
- Reluctance to exercise and stopping on walks
- Difficulty in climbing stairs and in jumping up
- Some animals will also lick painful joints, making the skin infected, sore and thickened over the affected areas
- Clicking noises from badly degenerated joints
- Crying out or groaning

## **TREATMENT**

Initially, you should consult your vet if you suspect that your dog or cat has a problem. Although a thorough clinical examination may well reveal sufficient information, further investigations, including X-rays, may be needed. There are now a wide variety of ways of treating arthritis and other joint problems.

Non-steroidal anti-inflammatory drugs (NSAIDs) form the mainstay of conventional treatment for joint pain. Although these drugs work well, many people are concerned about the long-term side effects or would like to try something more natural. Herbal remedies and special supplements known as nutraceuticals can provide a more natural solution to the problem.

Nutraceutical is a modern word used to describe food supplements that have medicinal or therapeutic benefits but which cannot be classed as medicines. Joint nutraceuticals work alongside traditional remedies, such as stinging nettles, bringing additional benefits and working in unison to improve on existing results. These benefits include reducing joint inflammation, improving lubrication and slowing degeneration.

## **HOW DENES CAN HELP**

The following Denes products can help with joint problems:

### **DENES GREENLEAF TABLETS**

This is a licensed herbal medicine for the symptomatic relief of arthritis. **Greenleaf Tablets** are based on stinging nettles which have a natural anti-inflammatory action and cleansing effect upon the body, helping to remove toxins and other unwanted metabolites. These substances, called free radicals, can cause symptoms such as joint pain and stiffness if allowed to accumulate. **Greenleaf Tablets** encourage the body to eliminate these substances through the kidneys, helping to relieve the symptoms of arthritis and to improve mobility.

### **DENES GREEN LIPPED MUSSEL EXTRACT WITH GLUCOSAMINE CAPSULES**

This supplement is based on a freeze-dried extract of Green Lipped Mussel (GLM) and a substance known as Glucosamine sulphate. Both of these are nutraceutical supplements known to help with joint problems.

Green Lipped Mussel, (*Perna canaliculus*) is a marine bivalve that is farmed in the clear, unpolluted waters around New Zealand. GLM has been used to treat joint

problems for over 20 years. During this period of time a considerable amount of research has gone into investigating how it works. It is known to contain compounds known as GAGs (glycosaminoglycans, sometimes referred to as mucopolysaccharides) that can help in the management of degenerative joint conditions. GLM also contains small amounts of glucosamine, one of the building blocks of GAGs, and a small quantity of Omega 3 fatty acids (similar to those found in cod liver oil) which has a limited degree of anti-inflammatory effect.

GAGs form part of the structure of connective tissue (the tissue that makes up bone, cartilage, tendons and ligaments) and provide both resilience and elasticity. Some types of GAGs attract water molecules, providing cartilage with extra shock absorption properties. They also have negative electrical charges so the GAG molecules tend to repel each other, imparting a degree of resilience and further protection against trauma and physical shock.

### **AGEING & GAGs**

Due to ageing, the level of GAGs naturally present in joints gradually decreases as natural production slows. This means that joint cartilage becomes susceptible to injury, damage and wear & tear. The ultimate consequence of this is the development of arthritis and its associated symptoms.

### **HOW GAGs HELP**

Using nutraceuticals that contain GAGs can help with the symptoms of arthritis by:

- Reducing inflammation and, therefore, joint pain and swelling
- Slowing the breakdown of cartilage and encouraging the rebuilding of new cartilage
- Improving mobility
- Increasing the viscosity of joint fluid and improving joint lubrication

### **GAGs & CONVENTIONAL DRUGS**

Some types of conventional anti-inflammatory drugs, principally NSAIDs, are thought to interfere with the natural production of GAGs, compromising the health of cartilage so that it becomes more susceptible to damage.

Some of these drugs can also irritate the lining of the gastrointestinal tract, causing vomiting or diarrhoea. Using nutraceuticals containing GAGs at the same time can significantly reduce the chances of this occurring by helping to protect the lining of the bowel. This means that in times of bad flare-ups, it is possible to use NSAIDs with little risk of causing bowel upsets.

### **GLUCOSAMINE SULPHATE**

Glucosamine also helps by protecting and regenerating cartilage. It is one of the fundamental building blocks of GAGs, and compounds known as proteoglycans, which are important components of connective tissue.

Research has shown that glucosamine sulphate can be effective in treating arthritis by stimulating the production of GAGs and collagen (a type of connective tissue that imparts strength) and can reverse some of the damage that occurs when arthritis develops.

The overall result is a reduction in joint pain and inflammation, increased mobility and a slowing down of the degenerative changes that occur in arthritis.

**Denes Green Lipped Mussel Extract with Glucosamine Capsules** contain:

- Green Lipped Mussel extract 200mg
- Glucosamine sulphate 150mg

Available pack size 100 capsules

**Denes Greenleaf Tablets** contain:

- Nettles powder BHP 32mg

Available pack sizes 50, 100, 400 tablets

### **DENES HOMEOPATHIC REMEDIES**

Homeopathy provides another alternative way of treating joint problems. Ideal remedies to try from our range of liquid remedies include the following.

Where the symptoms are:

Worse in damp, wet weather, better moving around and for warmth	<b>Rhus tox 30c</b>
Worse in hot weather, worse for movement, painful to touch the area	<b>Bryonia 30c</b>
For the knee joint especially	<b>Pulsatilla 30c</b>
Where pains/lameness moves from joint to joint	<b>Pulsatilla 30c</b>
As general remedies	<b>Symphytum &amp; Ruta grav 30c</b>
If severe add	<b>Arnica 30c</b>

### **COMBINING REMEDIES**

The use of a traditional herbal remedy such as **Denes Greenleaf Tablets** with a modern nutraceutical supplement such as **Denes Green Lipped Mussel with Glucosamine Capsules** combines the unique properties of both to help maintain the health and mobility of joints at their best.

### **OTHER USEFUL DENES PRODUCTS**

**Denes All-in-One Tablets.** In some cases of arthritis, supplementation of the diet with extra vitamins is also beneficial. **Denes All-In-One Tablets**, a natural herbal supplement, contain Parsley and Watercress, which are good sources of vitamin C. Some joint problems are known to benefit from supplementation with extra vitamin C. Additionally, **Denes All-In-One Tablets** have Seaweed as one of the main constituents. Seaweed is known to help relieve stiffness and can also assist with weight reduction where obesity is a problem.

**Denes Evening Primrose Oil Capsules.** Evening Primrose oil has been found to be helpful in treating some cases of arthritis and can be given alongside other recommended Denes products.

### **Denes Low Calorie With Chicken & Liver canned dog food.**

Ensuring that your dog is not overweight and on a healthy diet is just as important as any treatment. Obesity places undue stress upon ligaments and joints and is likely to hasten any degenerative condition. This recipe is ideal if you suspect that

your dog has a weight problem and can be fed as part of a weight reduction programme.

**Fasting.** In some circumstances we would recommend fasting your dog or cat once a week. This has a number of advantages. Fasting can help with weight loss but, more importantly, gives the body a chance to detoxify itself and eliminate some of the substances that can aggravate joint conditions.

Other useful Denes fact sheets to read:

- Fasting your cat and dog
- Obesity in cats and dogs
- Osteochondrosis
- Nettles
- Homeopathy

If you have any queries concerning your pet's health or feeding problems, you can contact us for free pet care advice by:

- Visiting our website [www.denes.com](http://www.denes.com)
- Emailing us at [info@denes.com](mailto:info@denes.com)
- Calling us on **01273 325364** Mon-Fri, 9am – 12Noon
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