# VeyFo®

# Dog-Motio-Mulgat



Rehabilitation dietetic microemulsion

# Dog-Motio Jelly Bones

Rehabilitation treatment for more mobility with MCHC\*

Micronutrients for the locomotor system of dogs

In case of joint problems, arthrosis and hip dysplasia



Formulations for professionals demanding peak performance



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### **Dog-Motio-Mulgat**

### **Dog-Motio Jelly Bones**





#### Conception/essential components for the nutritional purposes\*

Formulated in the form of a microemulsion with microcrystalline hydroxyapatitecalcium phosphate (MCHC), linseed oil, omega-3-fatty acids from fish oil with 0.43 % eicosapentaenoic acid (EPA), 10 IU/ml vitamin  $D_3$ , 5 mg/ml vitamin E, lecithin, hyaluronic acid, propylene glycol, cellulose powder and aroma premix Veyx "DoMoRom" Formulated as a soft gum with microcrystalline hydroxyapatite-calcium phosphate (MCHC), linseed oil, omega-3-fatty acids from fish oil with 0.72 % eicosapentaenoic acid (EPA), 30 IU/ml vitamin  $D_{3}$ , 6.9 mg/g vitamin E, lecithin, hyaluronic acid, gelatine

#### **Product characteristics**

Dogs have an exceptional motivation and drive to be mobile. The healthy development and maintenance of effective bones, joints, cartilage, ligaments and tendons is crucial to their zest for life and physical performance. Through the facilitating of optimum housing conditions, along with appropriate nutrition, the dog owner has a considerable influence on these important aspects.

VeyFo® Dog-Motio-Mulgat and Jelly Bones are complementary dietetic feeds for dogs

- formulated with organically bonded components meeting the particular requirements for bioavailability and product safety
- as well as the requirements for the particular nutritional purpose "Support of the metabolism of joints in the case of osteoarthritis" according to the "List of intended uses of animal feedingstuffs for particular nutritional purposes".

<sup>\*</sup> Note: The information given is to be understood as a general survey and are subject to alterations, especially if these do not affect the intended nutritional purpose. The latest version of the labelling of the product/packaging is always valid.

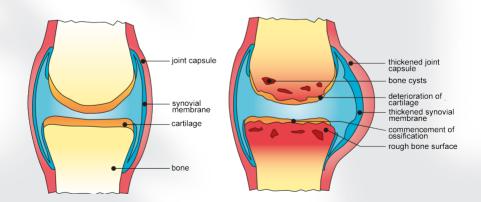
## Degenerative functional disorders of the joints

Degenerative processes such as arthrosis or hip dysplasia (HD), as a consequence of which similar degenerations are observed, are the most frequent cause of functional disorders of the joint. They commence with the breakdown of the cartilage in the joint. The cartilage serves as a shock-absorber between the bones in the joint. Its function is supported by the synovial fluid, which provides nutrients for the cartilage and surrounds it rather like a ball bearing. When it recedes, it results in the bones rubbing painfully against each other. The irritated periosteum reacts with inflammation and deformity of the bones in the joint. Thus the joint's function is progressively and severely impaired. At an advanced stage it can even develop into an ossification of the joint and to permanent stiffness. Frequently, there are a number of joints affected. The causes of these processes can be a lack of exercise (especially in puppies), too early or excessive strain, injuries, abnormal posture and not least an inadequate nutrition.

#### How can arthrosis be recognised?

Signs for arthrosis are:

- Unwillingness to exercise
- Shuffling gait
- The avoidance of particular movements (i.e. jumping)
- Problems to stand up
- Pain symptoms (tremor, tense facial muscles, breathing behaviour, groaning).



#### What has to be done?

Already first signs of a movement disorder should be the cause for the clarification of the further procedure following the veterinary diagnosis. The use of suitable pharmaceuticals is the matter of veterinary medicine. Complementary or dietetic feeds of whatever kind will not be able to replace these. VeyFo® Dog-Motio-Mulgat and Jelly Bones have been designed to positively influence the essential convalescence-/ regeneration processes as well as to support therapeutic strategies this way.

#### What is MCHC?

MCHC - microcrystalline hydroxyapatite-calcium phosphate - is a complex joint nutrient material produced through a special freeze-drying process that ensures the harvesting of an intact non-collagen-protein-matrix.

It consists of 50 % mineral-vitamin-complex, 40 % collagen-protein and 10 % non-collagen-protein.

Along with the main components calcium, phosphorus, magnesium, silicon, manganese, copper, zinc, molybdenum as well as the vitamins D and E, the mineralvitamin-complexes VeyFo® Dog-Motio-Mulgat and Jelly Bones also contain the non-collagen-protein-matrix including the following crucial binding proteins required for the development of the skeleton and the skeletal connections:

- The cellular proteins fibronectin, thrombospondin, osteopontin, the proteoglycans (glycosaminoglycans) chondroitin sulphate 4 and 6, heparan sulphate, keratin sulphate, dermatan sulphate and hyaluronic acid,
- **the**  $\gamma$ -carboxyl-protein osteocalcin and matrix-Gla-protein as well as
- the osteonectin, vitally important for the growth of bone cells, that combines with calcium ions, hydroxyapatite, collagen and thrombospondin.

# VeyFo<sup>®</sup> Dog-Motio-Mulgat and Jelly Bones deliver vitally important nutrients

The proteoglycan chondroitin naturally available in MCHC and synthesised by the cartilage cells – the chondrocytes – plays a central role and is vitally important for the physiological functionality, not only in joints, cartilage, bones and joint capsules, but also for tendons and ligaments.

Hyaluronic acid, omega-3 fatty acids and lecithin are additional ingredients of major importance contained in the products.

Hyaluronic acid plays a particularly important role as the main component of the synovial fluid (joint fluid) and to a considerable extent in the joint cartilage itself.

Fatty acids, especially omega-3 fatty acids, make an important contribution to the control of various metabolic processes in modern animal nutrition. They are jointly responsible for the phagocyte production and above all for their activity.

Lecithin in general has a beneficial regulating effect on liver and bile and supplies choline from which neurotransmitters for the nerves are produced in the organism.

### VeyFo® Dog-Motio-Mulgat and Jelly Bones have an all embracing effect

A broad spectrum of nutrients specifically aimed at the needs of the joints and the locomotor system

- supports the essential convalescence/regenerative metabolic processes
- and thus becomes an indispensible part of a successful rehabilitation.

Merely removing joint pain and reducing inflammation is not the only way, it is preferable to initiate the prevention and alleviation of the underlying causes of joint ailments.

# VeyFo<sup>®</sup> Dog-Motio-Mulgat and Jelly Bones – products with a unique targeted nutritional expertise that

- promote the regeneration of cartilage-, bone formation- and connective tissue cells
- support the regeneration of cartilage, bone substance, joint capsules, tendons and ligaments prior to, during and following joint problems caused by wear and tear or in case of a pre-existing joint ailment
- do not cause an excess supply of calcium and thus avoids the calcification of the soft tissues
- are pure natural products and can therefore be fed over long periods without any problem
- are easy to dose and readily consumed because of the flavouring.

#### Give your dog a treat, as mobility is everything to it

VeyFo<sup>®</sup> Dog-Motio-Mulgat will not immediately alleviate painful joints in your dog. Thus it prevents a premature return to exercise before the joints have fully recovered, where the motivation to exercise would create new and additional stress leading to further joint damage.

VeyFo<sup>®</sup> Dog-Motio-Mulgat initiates and controls the essential regenerative metabolic processes with natural nutrients and minerals that are necessary for the stability and the performance ability functions of the locomotor system.

- In immature dogs that are still growing, to promote the development of strong bones and joints and to avoid developmental disorders.
- In mature dogs, to counteract the symptoms of wear and tear throughout the whole of the locomotor system, especially where the animal has to produce high performance in sport and work situations.
- In case of existing abrasion and wear and tear symptoms in the joints, cartilage and ligaments (e.g. in case of hip dysplasia), through providing for the regeneration processes and the optimum supply of nutrients for the re-establishment of unhindered movement.
- In case of restrictive or operatively treated bone fractures.

## A zest for life and performance potential simply added to the feed or with Jelly Bones on the go

With VeyFo<sup>®</sup> Dog-Motio we have an efficient complementary dietetic feed at our disposal. This contains vitamins, trace elements, lecithin and omega-3-fatty acids in addition to the native glycosaminoglycans and the native hyaluronic acid naturally available in MCHC (hydroxyapatite-calcium phosphate).

Here those micronutrients are of particular significance that promote the endogenouos synthesis of the substances strengthening the joint function in the chondrocytes.

# VeyFo<sup>®</sup> Dog-Motio-Mulgat and Jelly Bones as complementary dietetic feeds that

- optimise the provision of nutrients and minerals essential to the joints that are indispensable for the regeneration process in case of a pre-existing joint ailment,
- strengthen the joint capsules, tendons and ligaments without causing an excess supply of calcium and thus avoids calcification of the soft tissues,
- promote the development of cartilage, bone and connective tissue cells,
- are natural products and can therefore be fed over long periods without any problem,
- are easy to dose and readily consumed because of the flavouring.

Effect	Gluco- corticoids	Glyco- samino- glycans	Hyaluronic acid	VeyFo® Dog-Motio- Mulgat and Jelly Bones
Facilitating normal joint functions	•	٠	••	•••
Fast reduction of the factors limiting unhindered mobility	•••	•	•	•••
Consistent unhindered mobility	•	•	•	•••
Physiological viscosity of the joint fluids	•	•	••	•••
Thixotropy of Synovia (abrupt change of the viscosity from recovery to stress phases)				•••
Inhibition of catabolic enzymes		•	••	•••
Regeneration of the cartilage forming cells		•	••	•••
Regeneration of the connective tissue cells			•	•••
Increasing the formation of collagen proteins				•••
Increasing the formation of non-collagen proteins				•••

• = light influence, •• = mean influence, ••• = strong incluence

# Feeding/Dosage recommendations for VeyFo® Dog-Motio-Mulgat

The product is consumed eagerly by dogs and is usually taken up without difficulty. It is easily rationed using the enclosed measuring beaker. Naturally, the product can be mixed with the daily feed.

Duration of feeding	Basic provision	6 - 8 week treatment 2 x annually	8 - 12 week treatment 1 x annually			
Dosage per day						
In the growing phase	0.4 ml/kg BW up to max. 10 ml					
During highly demanding phases	0.4 ml/kg BW up to max. 10 ml	0.8 ml/kg BW up to max. 20 ml	0.6 ml/kg BW up to max. 15 ml			
At the beginning of, or with preexisting mobility disorders	0.5 ml/kg BW up to max. 20 ml	1 ml/kg BW up to max. 30 ml	0.8 ml/kg BW up to max. 25 ml			
Regeneration following bone fractures, surgical intervention		0.8 ml/kg BW up to max. 25 ml	0.6 ml/kg BW up to max. 20 ml			

BW = Body Weight

Introduce the feed – for an initial period of up to 3 months – by giving about a third of the recommended dosage and after 3 days increase it up to the target intake. The daily ration can be split into two feeds.

In dogs with a pre-existing joint ailment it should be fed daily over a longer time period (possibly over 6 - 12 weeks).

This application can be repeated as required at 2 to 3 monthly intervals.

In sporting dogs it is recommended to feed the product in support of the convalescence-/regenerative processes during the competitive season, based on the level of stress and demands made on the dog.

It is recommended that a veterinary surgeon's opinion be sought before use or before extending the period of use.

# Feeding/Dosage recommendations for VeyFo® Dog-Motio Jelly Bones

Basic provision per animal and day:

Small breeds (1.5 - 13 kg BW)	1 - 2
Medium sized breeds (14 - 30 kg BW)	3 - 4
Large breeds (> 30 kg BW)	5 - 6

The healthy award for a better physical fitness and mobility.

May also be fed as a supplement or in combination with VeyFo<sup>®</sup> Dog-Motio-Mulgat. 1 Jelly Bone corresponds to approx. 3 ml.

#### Package sizes

## VeyFo® Dog-Motio-Mulgat

500 ml bottle Monthly treatment packaging: 2 x 500 ml bottles

### VeyFo® Dog-Motio Jelly Bones

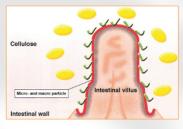
Box of 9 blisters of 5 x 3 g

# VeyFo<sup>®</sup> Mulgat– Microemulsions allow vitamins and micronutrients to be effective

The special route of absorption and thus the rapidly accessible and high concentrations of the nutrients in the tissues are charactreristic. Histological investigations of sections of the small intestine show that particles of the emulsion of the VeyFo® Mulgat-products are already available in the lymph vessels of the intestinal villi within 10 minutes. From here they are carried into the bloodstream without having to pass through the liver first.

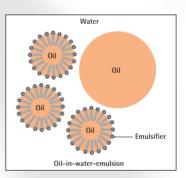
#### Dispersal in the small intestine

The multiple microemulsion ensures the unhindered passage of essential nutrients and micronutrients through the stomach into the small intestine and their perfect dispersal over the whole area of the gut mucosa as well as the subsequent corpuscular lymphatic absorption.



## Physiology of the VeyFo<sup>®</sup> Mulgat-Microemulsions

Emulsification means finest mixture of at least two non-intersoluble liquids whereby one of the liquids is dispersed in the other in the form of minute droplets. In order to ensure that the emulsion remains stable a herbal emulsifier (lecithin) is added. The result is a microemulsion with characteristics very similar to the dam's own milk.



Thus emulsification means an extraordinary large increase in the effective surface area. Hence, for the efficacy of the emulsion it is highly important that

- it remains stable in the stomach until absorption occurs in the small intestine,
- it contains an emulsifier that can be metabolised and is absolutely harmless,
- absorption also remains assured during fat metabolism disorders,
- and above all, that there is no accumulation of the fat-soluble vitamins in the liver.

# High performance animals require optimised feeding regimes. We want you to be successful and do our utmost to achieve this target.

All constituents contained in VeyFo® Dog-Motio-Mulgat and in the Jelly Bones are well known in animal nutrition. They are also used as nutritional supplements in humans. The quality and processing meet the highest purity criteria thus achieving a long shelf-life as well as a trouble-free application of the same.

#### **Additional instructions**

Shelf-life: Original packages sealed and stored at max. 20 °C 24 months from manufacturing date, opened and re-sealed packages min. 6 months. For information concerning storage, please, kindly see label.

In order to achieve a clear separation from our veterinary medicines and care products, all our Complementary and dietetic feed specialities that are subject to the feedstuff law – as the present ones – are exclusively marketed and labelled under our umbrella brand "VeyFo®". They are no medicinal products and need not to be entered into the stable treatment diary.

The information given in this brochure corresponds to the state of knowledge upon completion.

Please read the product leaflet prior to use.

Veyx-Pharma is GMP-, QS- and VLOG-certified.

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