



Pet food ingredients







Bioiberica

Taking life science further

Bioiberica is a global life **science company** **committed** to improving **people, animal and plant health** and well-being. We work to identify, extract and develop quality APIs and ingredients and turn them into **high-quality products** to progress the pharmaceutical, nutraceutical, veterinary, feed and agricultural industries.

It's how we grew to become the **world's leading heparin API manufacturer**, and how we help our customers discover new possibilities too.

Together with our commitment to excellence, safety, security and sustainability, we explore new horizons. And in the process, take all that we do even further.



SARIA[®]





Bioiberica is part of the SARIA Group, a leading international company that create value for their partners and the environment, by acting as a reliable service provider and manufacturer of quality products for the agricultural, energy, animal feed, food, and pharmaceutical industries. Saria's extensive product and service portfolio is based on the transformation of animal co-products into high-quality raw materials for new applications. Accordingly, SARIA Group business model makes an important contribution to environmental sustainability.

This **vertical integration** with SARIA Group allows us to **guarantee our presence throughout the product life cycle** from initial development and production to commercialisation. It also provides a solid supply chain model, as well as **flexibility and production capacity**.

With our 11,000 employees and operations in 26 countries, SARIA Group is committed to a sustainable world and healthier living

Bioiberica Petfood Ingredients

At **Bioiberica**, we believe the key to true pet health goes beyond nutrition. Which is why we've combined **20 years' experience** in the veterinary sector with our scientific expertise to **pioneer ingredient solutions** across a wide range of health areas to improve overall pet wellbeing.

We take a holistic approach to pet health - developing functional ingredients that span major health areas with the aim of improving pets' overall wellbeing. We look to inspire and unlock new opportunities for our customers via our range of **high-quality**, science-backed **ingredients** for pet food products.





Science



Excellence



Biosecurity



Sustainability



Ingredients

Acti-joint[®]_{pro}

Mobilee[®]

Collavant[®]_{n2}

CSbioactive[®]

GLUCOSAMINE

PALBIO[®]
62 SP

NUCLEOFORCE[®]
Dogs

Acti-joint[®] pro

Acti-joint[®] pro is Bioiberica's **comprehensive articular solution** comprised of glycosaminoglycans and native type II collagen. Formulated to **positively affect the joint health** degenerative and debilitating diseases in the pet population, this scientifically backed ingredient* is **recommended for conditions, involving joint wear and tear.**

*Sifre et al. Osteoarthritis & Cartilage 2020.





Recommended Claims

We recommend using **Acti-joint®** pro to protect the joints of dogs and cats in the following situations:

- Food for senior animals with joint wear or loss of joint functionality and mobility.
 - Food for overweight animals or overloaded joints.
 - Food for animals with high level of exercise.
 - Food for animals after joint surgery or post-traumatic conditions to promote better recovery of the animal.
 - Food for young animals to support the nutrition of developing joints.
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Recommended product dose
in pet food



2,0 kg/Tn



2,5 kg/Tn

Mobilee[®]

Hyaluronic acid matrix ingredient
for joint health

Mobilee[®] is a hyaluronic acid **matrix** ingredient containing a high concentration **hyaluronic acid (HA), mucopolysaccharides and collagen**. Backed by multiple scientific studies*, the **synergistic effect** of its three naturally-occurring components is shown to have **anti-inflammatory and anabolic** effects, as well as stimulate HA secretion to synovial fluid for improved joint function.

According to pharmacological model studies, Mobilee **multiplies by 10 the endogenous synthesis of hyaluronic acid**, and is more powerful than fermentation HA, thanks to the combined action of its components.

*Serra Aguado, CI; et al. Animals 2021
and Torrent et al. Osteoarthritis and
Cartilage 2009





Recommended Claims

- Induces synthesis of endogenous hyaluronic acid in the synovial membrane.
 - Regulates metabolism of hyaluronic acid in the synovial membrane.
 - Reduces synovial effusion, a risk factor for osteoarthritis.
 - Reduces joint discomfort and supports joint function.
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Recommended product dose
in pet food



48 ppm



60 ppm

Collavant[®]n2

Native (undenatured)
type II collagen

Collavant[®] n2 is a trusted source of quality **native (undenatured) type II collagen** - the main structural protein in cartilage and other connective tissues. Compared to its hydrolysed counterpart, **native collagen** works via an immune-mediated mechanism of action called **Oral Tolerance**, to support joint health at very low dose.

This mechanism **helps to regulate the body's response to endogenous type II collagen**, reducing its degradation* and supporting healthy joints.

*Sifre et al. Osteoarthritis and Cartilage 2020.



Oral Tolerance comprises the following stages:



Native (undenatured) type II collagen reaches the intestine.



It interacts with the Peyer's patches in the intestine, which are responsible for immune surveillance.



It turns off the immune response against endogenous type II collagen.



It reduces collagen degradation in the joint supporting joint health.

Recommended Claims

- Helps reduce collagen degradation in joints.
- Helps reduce inflammation markers of degenerative joint pathologies.

Recommended product dose in pet food



25 ppm



25 ppm

CSbioactive[®]

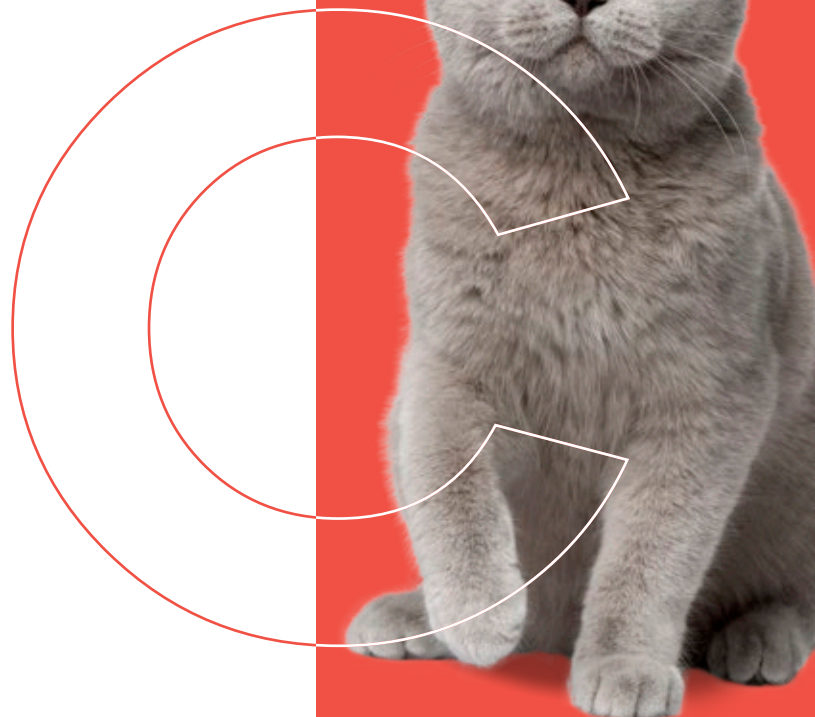
The reference Chondroitin sulfate

Bioiberica's **CSbioactive[®]** is a widely researched* **chondroitin sulfate** shown to induce an **anabolic and anti-catabolic response in the cartilage** of animals, supporting joint health. A complex biological substance, **CSbioactive[®]** stands out for its **unique molecular properties****, ensuring a highly purified, intact, and consistent molecule manufactured to the highest pharmaceutical quality standards.

*Segarra S, et al. BSAVA Congress 2013.

Velasco A et al. Revista AVEPA 2009.

**Martel-Pelletier J, et al. Molecules 2015.





Recommended Claims

- Increased in vitro synthesis of the cartilage matrix components.
 - In vitro and in vivo reduction of the cartilage degradation.
 - Helps to maintain joint health.
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Recommended product dose in pet food

*The joint supply of **CSbioactive** and Glucosamine is recommended to optimize the results.

High dosage

1.000-2.000 ppm **CSbioactive**
1.000 ppm Glucosamine

Medium dosage

350 ppm **CSbioactive**
1450 ppm Glucosamine

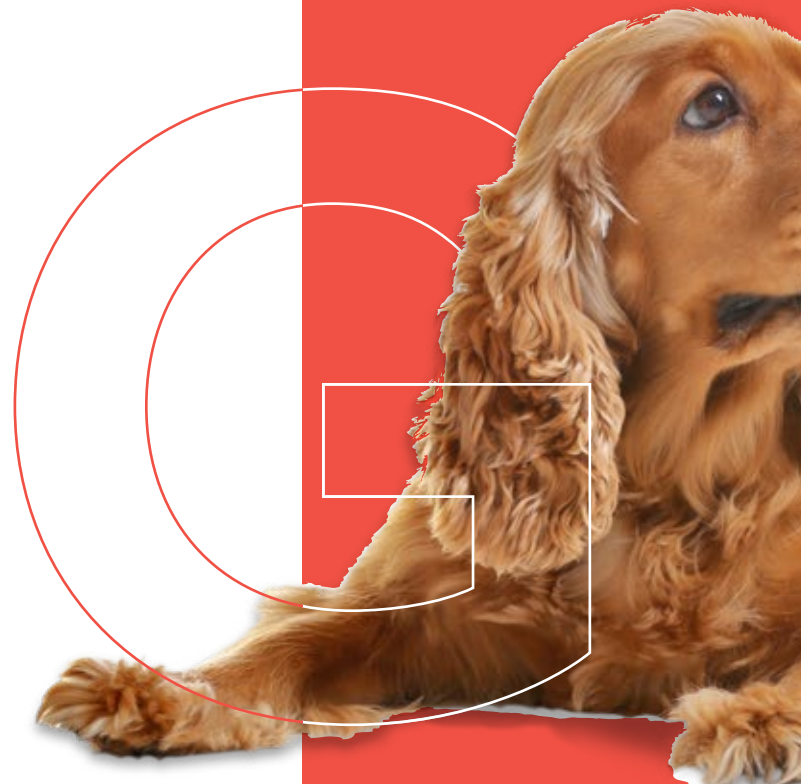
Low dosage

225 ppm **CSbioactive**
275 ppm Glucosamine

GLUCOSAMINE

Glucosamine is an amino sugar and precursor for the synthesis of glycosaminoglycans (GAG) –such as **hyaluronic acid**– which is a component of most connective tissues and therefore, important for joint health. It is also a natural component of proteoglycans* found in articular cartilage, intervertebral disc and synovial fluid.

*PROTEOGLYCAN = Protein + GAG.





Recommended Claims

- Contributes to the synthesis of glycosaminoglycans and proteoglycans.
- Supports the healthy development of cartilage and joint tissues.

Recommended product dose in pet food

*The joint supply of **CSbioactive** and Glucosamine is recommended to optimize the results.

High dosage

1000 ppm
Glucosamine
1.000-2.000 ppm
CSbioactive

Medium dosage

450 ppm
Glucosamine
350 ppm
CSbioactive

Low dosage

275 ppm
Glucosamine
225 ppm
CSbioactive



PALBIO[®] 62 SP

The natural solution for a healthy
and sustainable growth

Palbio[®] 62 SP is a raw material for pet food based on **highly digestible and palatable hydrolyzed proteins obtained from porcine intestinal mucosa** that promote food intake and **supports gut health*** in pets.

It is a safe source of high-quality proteins and functional peptides that is obtained with a unique industrial process (**Enzyneer[®]** technology). This process results in a product composed of L- α -amino acids and bioactive peptides, which positively impacts in the gut health of the animals.

*González-Solé F, et al. Animals 2020.





Recommended Claims

- Supports overall food palatability
 - Supports overall food digestibility.
 - It is a hypoallergenic ingredient.
 - Contains high level of amino acids and bioactive peptides.
 - Without anti-nutritional factors.
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Recommended product dose
in pet food



10-20 kg/Tn



10-20 kg/Tn



NUCLEOFORCE[®]

Dogs

Our proprietary nucleotide formulation to support immunity and intestinal health.

Bioiberica's **Nucleoforce Dogs** is a balanced concentrate of free nucleotides and active precursors obtained from yeast. These semi-essential nutrients are necessary for the development of tissues, with high cell replication rate – such as immune and intestinal tissues. They are **especially important and become essential nutrients during times of stress, malnutrition or infection** when an animal cannot meet their nucleotide requirements from endogenous sources*.

*Segarra S. Microorganisms 2021.





Recommended Claims

- In pups and young dogs: it contributes to the correct development of intestinal cells and supports vaccine response.
 - Senior pets: supports intestinal health and immune activity.
 - Animals with high level of exercise: support in high workload situations, contributing to the recovery process.
 - Immunosuppressed or convalescent animals supports digestive and immune response after chemotherapy.
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Recommended product dose
in pet food



600 ppm



600 ppm









Manufacturing site

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