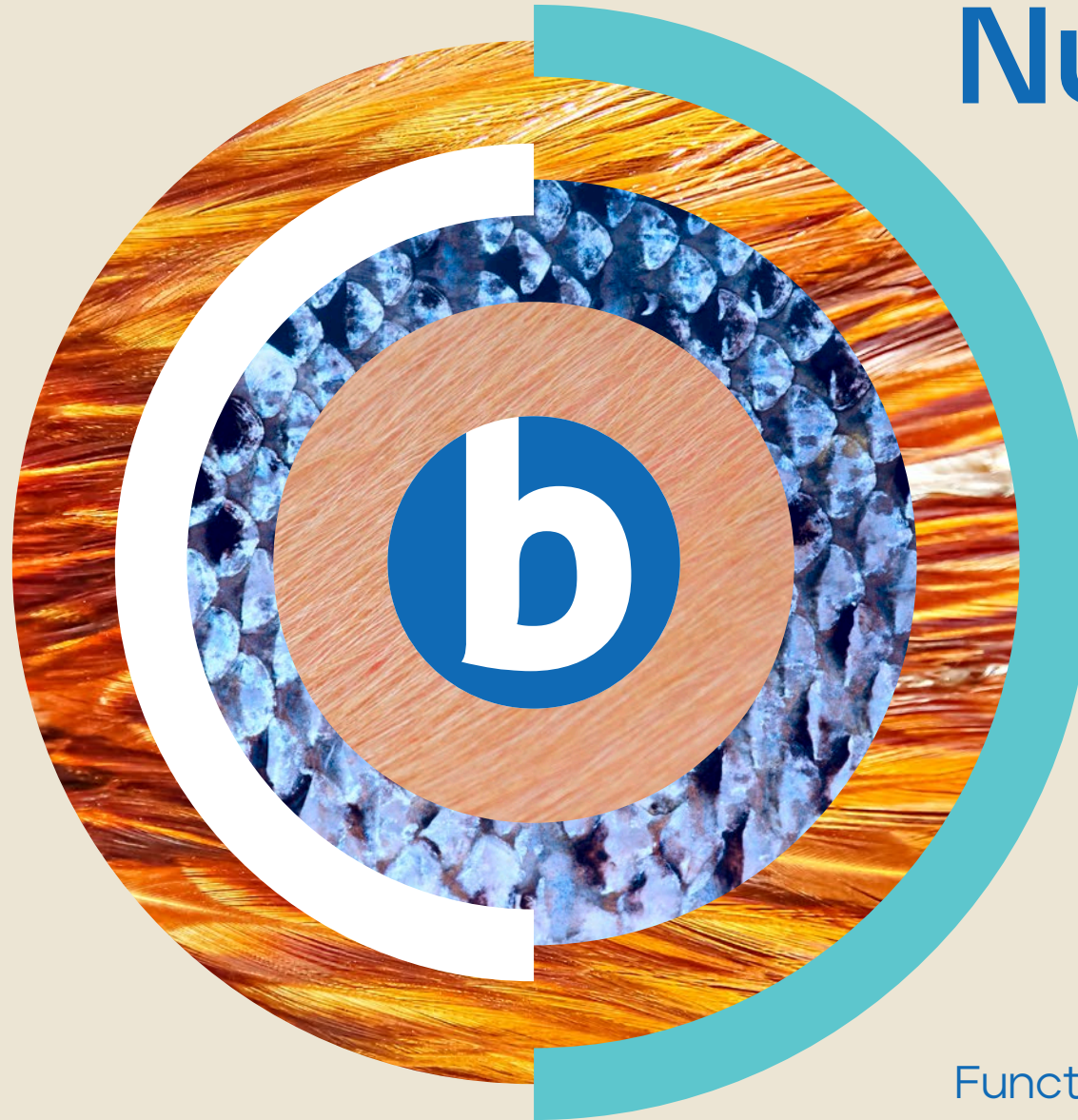


Animal Nutrition



Functional, Innovative
and Safe animal
feed ingredients







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Taking life science further

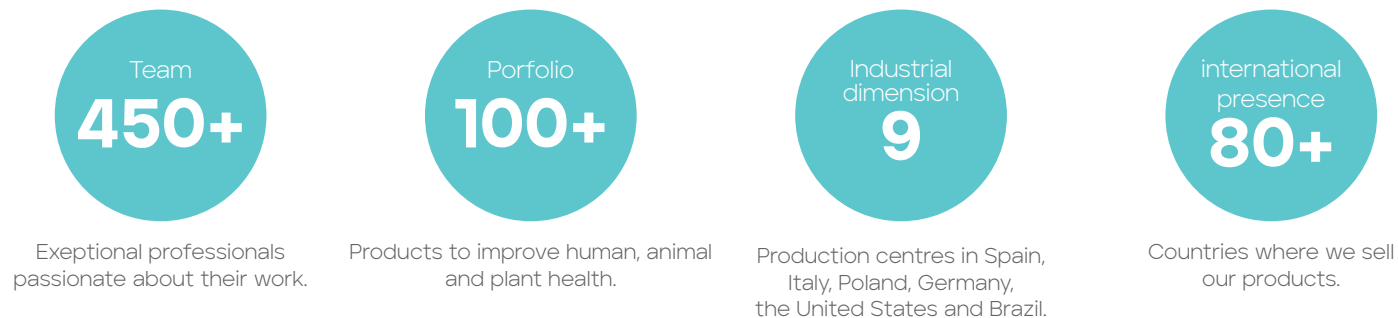
Bioiberica is a global life science company. Looking after human, animal and plant life has been our priority for more than 45 years. We're a world leader in the production of the active ingredient heparin, the main anticoagulant that saves approximately 100 million lives a year, and a benchmark in the manufacture of active and functional ingredients for the pharmaceutical, nutraceutical, veterinary, animal nutrition and agricultural sectors.

Our leadership is the result of our passion for life and science, as well as **our commitment to quality and safety.** Thanks to a safe and fully traceable supply chain, based on a circular economy model, we guarantee excellence in production and the sustainability of our operations, reaffirming our ongoing commitment to innovation and the development of projects for new molecules, APIs and ingredients with partners around the world.

Bioiberica continues to grow as a global company with headquarters in Palafolls and offices in Esplugues de Llobregat (Barcelona). We currently export to more than 80 countries, have production sites in Spain, Italy, Poland, Germany, the United States and Brazil, and a team of over 450 professionals to offer a portfolio of more than 100 products.

Bioiberica in numbers

Founded in 1975



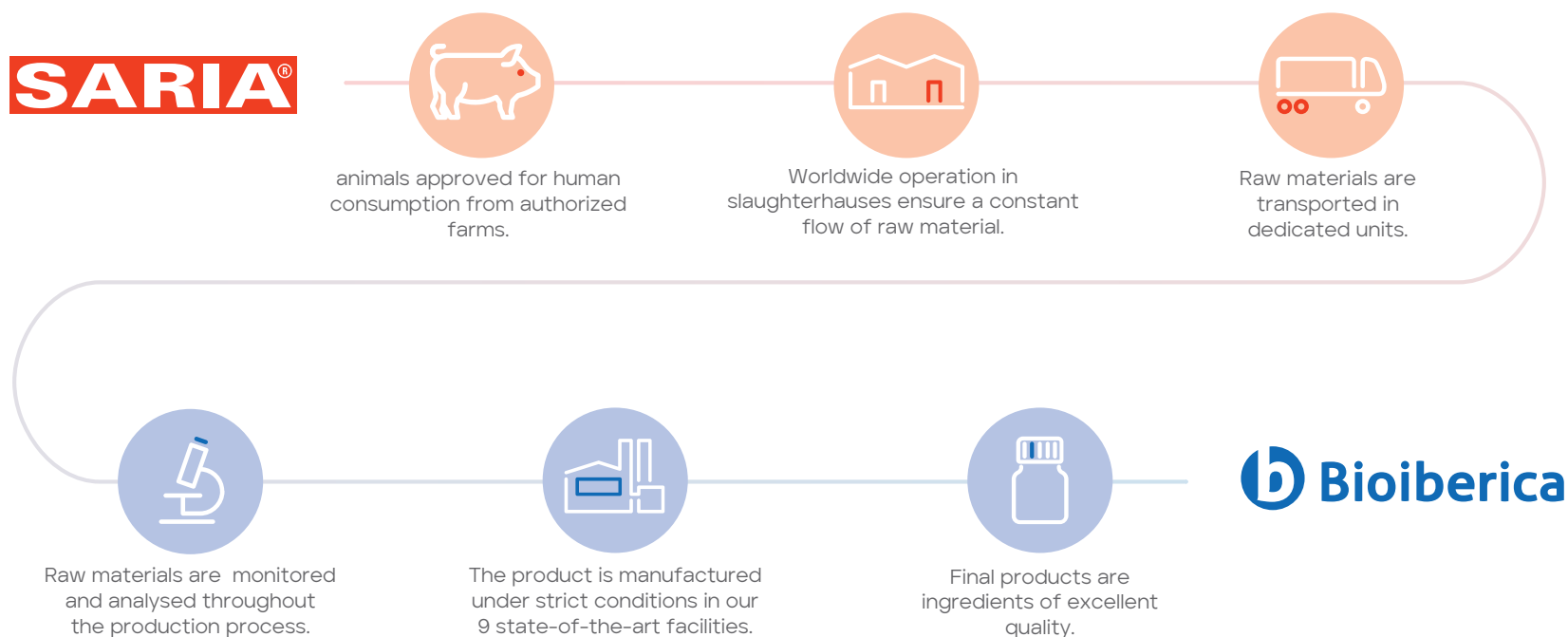
With our 11,000
employees and
operations in
26 countries,
SARIA Group
is committed to
a sustainable world

Vertical Integration

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, catering 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.





The sustainability,
economic efficiency,
social fairness and
environmental
responsibility **guarantee**
continuity and propel us
into the future

Circular Economy

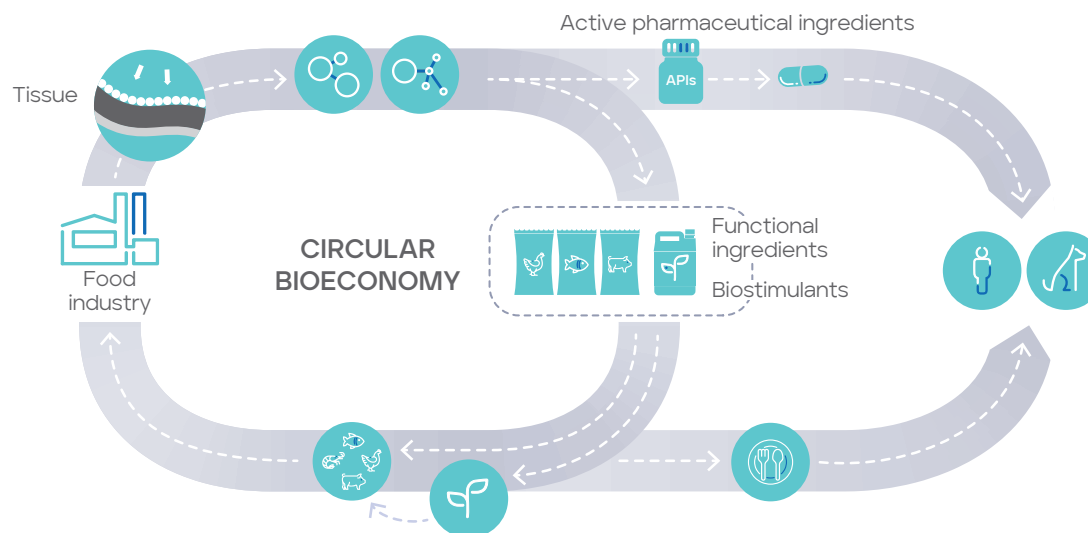
Efficiency in the use of resources

Our passion for life also means that we respect it. Our commitment to **sustainability** is deeply rooted in the **core of our activity**, based on a circular economy model from which we obtain our products.

At Bioiberica we're experts in **making the most of each and every one of the raw materials** we work with and **minimising resource waste**. In fact, during the process to manufacture our pharmaceutical and nutraceutical products for human and pet health, we also obtain other useful products, used to create high value feed ingredients and compounds for agriculture.

Our production processes are designed to minimise the consumption of **water, energy and auxiliary raw materials**.

Minimum
consumption
of water, energy
and auxiliary
raw materials



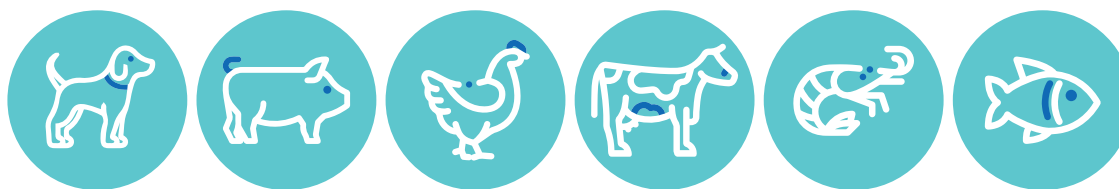
**Functional, innovative and
safe animal feed ingredients**
which support health and
enhance performance
and well being of
the animals

Animal Nutrition

Animal Nutrition division specialises in the development, production and commercialisation of functional ingredients designed to support major health areas with the aim of improving overall nutrition and wellbeing of farm animals, aquaculture species and pets.

Our goal is to preserve the animal's nutritional welfare, and help our customers to optimize the sustainability and profitability of their businesses.

Our portfolio offers unique solutions for animal nutrition:



PALBIO


We are leaders in **high-quality hydrolysed proteins** obtained from porcine intestinal mucosa. **Palbio** shares manufacturing process with the active ingredient **heparin**, that is extracted from the same animal tissue.

NUCLEOFORCE

We have a specific range of **highly concentrated free nucleotides from yeast extracts** designed for each animal species.

PET FOOD INGREDIENTS

We are a reference manufacturing company in functional ingredients used to support pet's joint health: chondroitin sulphate, glucosamine, hyaluronic acid and collagen.



With Enzyneer[®] we obtain
L- α -aminoacids and
bioactive peptides,
protein compounds with
different biological activities



And, What's Enzyneer?

Enzymatic hydrolysis of proteins in natural co-products generates high quantities of free amino acids and peptides that have both **nutritional and physiological specific functions** for farm animals, aquaculture species and pets.

At Bioiberica we use **Enzyneer®**, a proprietary technology based on a unique and specific enzymatic hydrolysis.

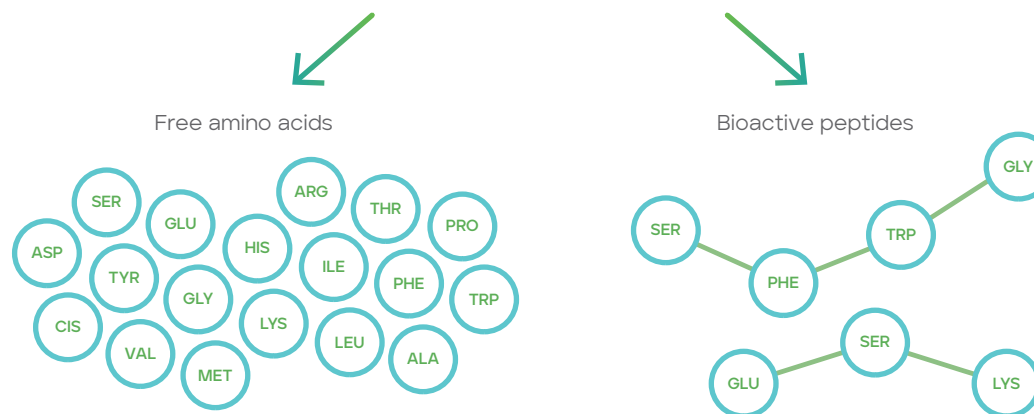
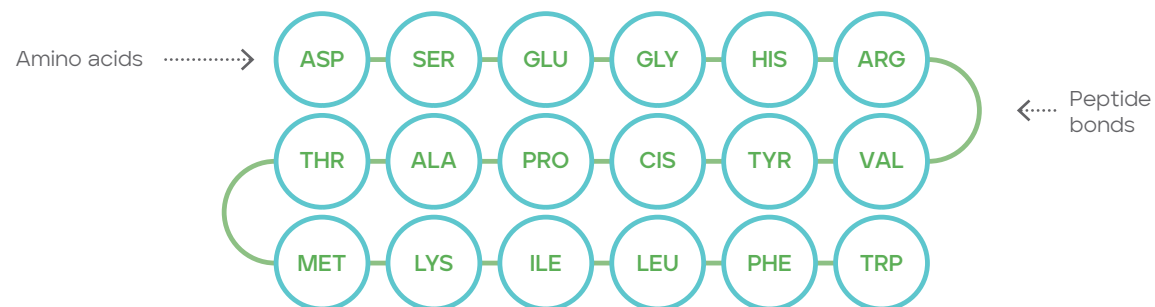
Enzyneer® uses the power of the enzymes, which, unlike other types of hydrolysis, acts by intelligently breaking down protein structures to release amino acids and peptides in their natural, active and functional state.

Enzyneer,
the power of enzymes,
the strength of technology

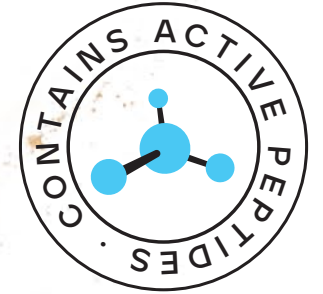




enzyneer



Enzymes break the peptide bond that links different amino acids, removing it and releasing large amounts of L- α -amino acids and bioactive peptides.



PALBIO

Palbio is a functional ingredient that triggers specific biological functions **to contribute to intestinal development and health.**

Palbio is a source of high-quality hydrolysed proteins for animal nutrition, extracted from porcine intestinal mucosa, with more than 20 years of presence in the animal nutrition market.

The efficacy of Palbio has been proven in several scientific studies and different animal species. From these studies we have gathered evidences on Palbio's mechanism of action at different levels: **promotes the development and growth of intestinal cells, supports intestinal health, modulates a more favourable gene expression, contributes to feed digestibility and helps young animals improve their overall performance.**

Palbio is composed of free L- α -amino acids and small peptides with premium nutritional properties, such as **excellent palatability** and **outstanding digestibility** that encourages the consumption of feed and absorption of nutrients at the early ages of the animals.

Therefore, and thanks to its composition and characteristics, the continued use of Palbio has a positive impact on intestinal health of animals and **improves performance.**

**Biosafety,
first and foremost.**
A complete control
of Palbio production
process

PALBIO

All the raw material used is collected from authorised slaughterhouses and certified by health authorities. Exclusive collection lines are used, with exclusive transport facilities with direct discharge in stainless steel tanks.

The manufacturing process of **Palbio** includes a specific viral removal step, that has been certified by Texcell (Pasteur Institute), furthermore, thanks to the **Enzyneer®** technology, Palbio proteins are hydrolysed to very low molecular weight compounds, ensuring **the absence of any potential higher structure like a viral particle or a prion.**

Additionally, the risk of cross contamination is minimised, due to systematic audits, carried out by international certification companies.

All this provides a **solid and secure supply chain model.**





HIGH CONTENT
IN NUCLEOTIDES

NUCLEOFORCE

Nucleoforce is a functional ingredient **that supports young animal performance and contributes to the maintenance of intestinal health and immune modulation.**

Nucleoforce is a source of concentrated and balanced free nucleotides. These nucleotides are active precursors obtained from yeast with **more than 15 years of presence in the animal nutrition market.**

Nucleoforce is obtained after a combination of enzymatic hydrolysis and purification processes that turns the yeast cells into **highly concentrated free nucleotides ready to be absorbed and used in many metabolic processes.**

What are Nucleotides?

Nucleotides, as the **elemental biomolecules and building blocks of DNA and RNA**, are involved in **physiological and biochemical functions** including encoding and deciphering genetic information, cell proliferation, tissue growth and development, synthesis of proteins, mediating energy metabolism and cell signalling as well as serving as components of coenzymes.

In Animal Nutrition, nucleotides are of **special importance for the early maturation and development of the intestinal and immune systems.**

We take a
holistic approach
that span major
health areas with
**the aim of improving
pets' overall
wellbeing**

Pet food ingredients

At **Bioiberica**, we believe the key to true pet health goes beyond nutrition. We take a holistic approach **developing functional ingredients that span major health areas** with the aim of improving pets' overall wellbeing.

We specially take care of pet's joint health because **their mobility will play an essential role in their quality of life and general well-being**. Our offer includes several **market-leading** ingredients in this area.



Acti-joint[®]_{vet}

It's components have complementary mechanisms of action, performing at different articular levels to guarantee a complete joint nutrition.

CSbioactive[®]

Chondroitin sulphate is an essential component of joint cartilage that helps to maintain joint function and mobility.



GLUCOSAMINE

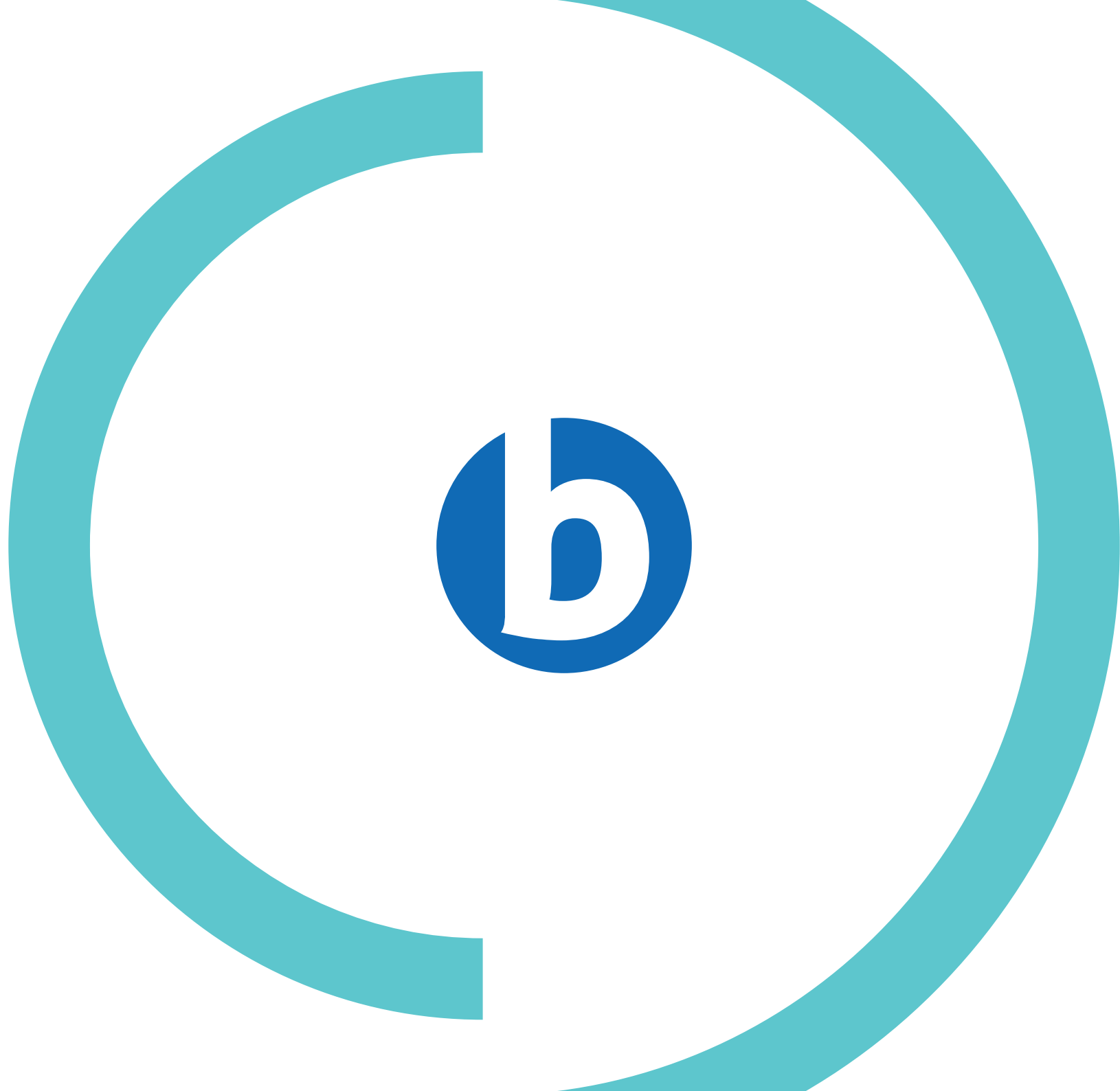
Glucosamine is a key component of joint cartilage present in most connective tissues and therefore important for joint health.

Mobilee[®]

Hyaluronic acid matrix ingredient and other components, including polysaccharides and collagen that supports simultaneously joint and muscle health.

Collavant[®]_{n2}

A trusted source of quality native (undenatured) type II collagen. Highly efficacious at a low dose.





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