

Together, let's empower the human health evolution

Explore our portfolio of world reference APIs and science-backed nutraceutical ingredients for human health innovation.



Bioiberica is a leading global life sciences company with 50 years of experience, committed to improving the health and well-being of people, animals and plants.

We believe that a healthier and safer world is possible; but only with accessible science and innovative ingredients produced by experts.

Since our foundation in Palafolls (Barcelona) in 1975, we have been dedicated to the research, production and marketing of naturally sourced molecules of high biological and therapeutic value serving the pharmaceutical, nutraceutical and food industries.

Our work is driven by a “One Health” approach, built on **three fundamental pillars**.



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**A healthier
and safer
future for all**



Today, we are recognized globally for our biologically derived APIs – including Heparin, Thyroid, Chondroitin Sulfate and Glucosamine and branded ingredients which are produced to best-in-class standards for quality and safety. Our portfolio of branded nutraceutical ingredients support innovation across key health areas: joint health (Collavant[®] n2, Mobilee[®], Tendaxion[®], CSbioactive[®]), skin health (Dermial[®]) and digestive health (DAOgest[®]).

**+1
billion**

The number of people who have benefited from our Heparin API alone.

1

Pioneering science and innovation

We're driven by a deep connection to life and science – and a passion for transforming health and well-being through constant innovation. Every year, we invest in R&D to push the boundaries of science, creating new molecules, actives, and branded ingredients in collaboration with leading international partners. This relentless focus on innovation strengthens our role as a global leader in advancing life sciences.



70,000⁺

analyses carried
out each year

50⁺

patents granted

30⁺

scientific publications
in the last 5 years

40⁺

recent projects
& collaborations
across **30+ research
centres in 10 countries**

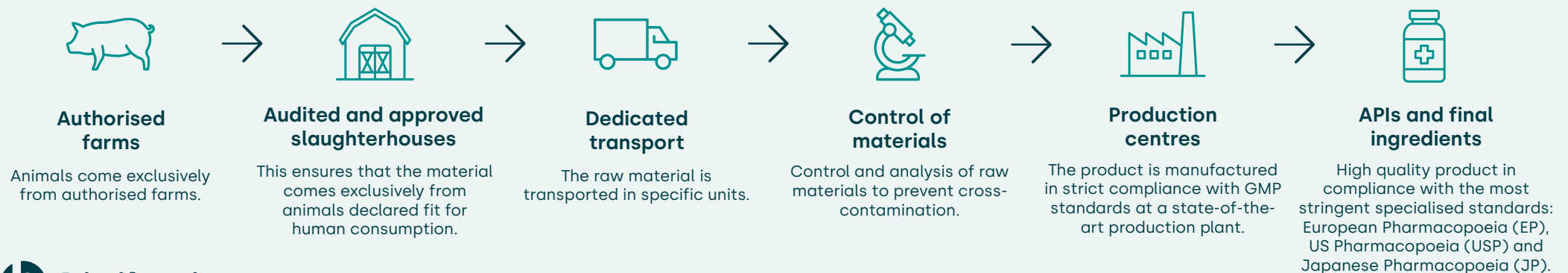
2

Trusted quality and safety standards

We are committed to the highest manufacturing excellence standards. All our APIs and nutraceutical ingredients are produced to best-in-class quality and safety specifications.



Supply chain management



We are rooted in Europe,
with a global presence –
bringing you local support
backed by global insights.

Present in
80 countries

500
professionals
dedicated to
production
excellence

20+ quality
audits and
inspections
passed
every year

Headquartered
in Palafolls,
Barcelona, Spain

We operate
9 global
production
sites

3

Circular economy model

We are passionate about building a healthier and more sustainable future for people – and the planet. Sustainability is at the heart of our strategy and vision, guided by a unique circular bioeconomy model that we have been pioneering for 50 years.



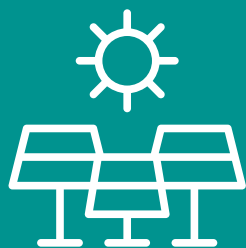
Supporting a zero-waste future – we revalue 90% of our co-products¹



Circular bioeconomy business model – balances health innovation and environmental protection



**Striving for climate
neutrality by 2050 –
committed to 10 UN SDGs¹**



**Powered by renewable
sources – 100% renewable
electricity and 20%
industrial water¹**



APIs

**We are the world
reference in biologically
derived APIs**

We are experts in our field, offering the analytical expertise, market insight and quality and regulatory support essential for pharmaceutical manufacturers to fast-track new product development and enhance global health.

**Explore how our APIs can improve
the lives of people worldwide.**

Heparin



Glucosamine

Thyroid



Chondroitin Sulfate



Heparin

We set the gold standard in heparin manufacturing

Our journey began in 1975 with the research and production of heparin. In the 50 years since, we have become a leading producer of this molecule, responsible for manufacturing *one in every five doses* of heparin administered worldwide.

Heparin is the most widely used anticoagulant and antithrombotic drug in the world and is considered an essential medicine by the World Health Organisation. Although primarily used for the prevention and treatment of thrombosis, the heparin molecule and its derivatives show enormous potential for the development of new drugs and applications, delivering anti-tumour, anti-inflammatory and antiviral activity.^{2,3}

- **Source:** 100% porcine from Europe, North America, South America
- **Certificates:** GMP
- **Quality standards:** EP; USP; JP
- **Use:** Pharmaceuticals (medical devices and reagents)

**Heparin saves more than
100 million lives each year.**

**We are actively exploring new applications in
close partnership with leading laboratories and
research centres worldwide, aiming to unlock
the full potential of this life-saving molecule.**



Our Heparin portfolio

We have deep expertise in the heparin molecules and its manufacture. Our specialised portfolio includes salts and heparin derivatives for pharmaceutical development and research purposes, including:

Dermatan sulphate

Plays a structural role in skin and other tissues, and potentially contributes to wound healing, blood coagulation and the immune response. Demonstrates anticoagulant and antithrombotic activity.

Heparin sodium

A widely used anticoagulant, commonly used to prevent and treat deep vein thrombosis (DVT), pulmonary embolism (PE) and during surgery or dialysis to stop blood clotting.

Heparin ammonium

Retains anticoagulant properties of heparin but is primarily used in laboratory and diagnostic settings, rather than direct therapeutic use.

Heparin lithium

Used primarily as an anticoagulant in blood collection tubes for laboratory testing. For example, it prevents blood from clotting in plasma preparation for biochemical tests.

Heparin calcium

Commonly used as an injectable anticoagulant for the prevention and treatment of thromboembolic accidents, especially in hospital or surgical settings.

Heparinoids

A group of heparin-like compounds that have a wide spectrum of biological activities but are not chemically identical to heparin. They are typically used for their blood-thinning, anti-inflammatory or wound-healing effects.

All our heparin products are manufactured at our main facility in Spain, adhering to the strictest international quality standards.

Our extensive knowledge of heparin enables us to offer tailored processes and formulations across our specialised portfolio that can be adapted to customers' specifications, making us the ideal partner for any heparin-related developments.

Thyroid

The natural choice

Hypothyroidism is a common condition where the thyroid gland does not produce enough thyroid hormones, which help regulate metabolism and many other bodily functions to support overall health. The symptoms of hypothyroidism include fatigue, weight gain, dry skin, hair loss and depression, among others.

The current gold standard treatment for hypothyroidism is levothyroxine (L-T4) – a synthetic drug. However, up to **10% of patients** treated with L-T4 still experience hypothyroidism symptoms and an impaired quality of life.⁴

Our thyroid API is a natural desiccated thyroid (NDT) manufactured in Europe via extraction from porcine thyroid glands. It contains hormones naturally produced by the thyroid gland – tetraiodothyronine (thyroxine or T4) and triiodothyronine (liothyronine or T3).

Up to 5% of the general population experience hypothyroidism.⁴

1.5+ million patients in the US were prescribed NDT in 2024.⁵

- **Source:** Porcine thyroid glands
- **Certificates:** GMP
- **Quality standards:** 3 USP; 1 USP
- **Use:** Pharmaceuticals; compounding pharmaceuticals

Chondroitin Sulfate and Glucosamine

for osteoarthritis and joint discomfort

Chondroitin sulfate is a glycosaminoglycan (GAG) – a key component of cartilage and tendons providing resistance and compression. Recognised as a symptomatic slow-acting drug for osteoarthritis (SYSADOA), it effectively reduces joint pain and improves mobility.

Glucosamine, a natural component of proteoglycans in cartilage and synovial fluid, is crucial for synthesising GAGs, like hyaluronic acid, which are essential for joint health. It is also recognised as a SYSADOA.

It is estimated that almost **1 billion individuals** will have some form of osteoarthritis by 2050.⁶

Our offering

Our chondroitin sulfate and glucosamine* APIs are made in Europe under strict GMP standards and meet both US and EU Pharmacopoeia requirements. As well as our ingredients, we provide the technical support and regulatory expertise manufacturers need to bring their products to market quickly and successfully.

*We offer multiple glucosamine forms: glucosamine hydrochloride, glucosamine sulfate sodium chloride and glucosamine sulfate potassium chloride.

Chondroitin sulfate

- **Source:** Bovine & porcine
- **Certificates:** GMP
- **Quality standards:** EP; USP; JP; KP; Ph. Russ
- **Use:** Pharmaceuticals; injectables; nutraceuticals; cosmetic & topical products

Glucosamine

- **Source:** Crustacean exoskeleton
- **Certificates:** GMP
- **Quality standards:** EP; USP; Ph. Russ
- **Use:** Pharmaceuticals; nutraceuticals



Branded ingredients

We offer a cutting-edge portfolio of science-backed nutraceutical ingredients for **mobility**, **skin & beauty** and **digestive health** innovation.

Discover how our branded ingredients can inspire health solutions that improve quality of life and well-being.



Collavant[®]_{n2}
Mobilee[®]
Tendaxion[®]
CSbioactive[®]

Dermial[®]

DAOgest



Mobility is more than just physical movement

Collavant[®]_{n2}
Mobilee[®]
Tendaxion[®]
CSbioactive[®]

It's about maintaining independence, staying active and living life to the fullest.

61% of consumers recognise the link between good mobility and overall health.⁷

45% are interested in mobility solutions even if they're not suffering from issues.⁷



Collavant[®]n2

A next generation collagen for joint health

Type II collagen is the main structural protein in the cartilage, providing tensile strength and toughness. If there is an immune response against endogenous type II collagen in the body, this can lead to joint disorders involving inflammation and cartilage degradation.

Our Collavant[®] n2 ingredient is a trusted source of quality, science-backed native (undenatured) type II collagen extracted from chicken sternum. Taken orally, it supports joint health and mobility at a low dose of 40 mg/day through a mechanism of action called Oral Tolerance.

Dietary supplement and functional food innovation

Low dose (40 mg/day)

Supported by seven scientific studies
(including clinical data in healthy subjects)

100% sourced and manufactured in Europe

Self-affirmed GRAS status

Backed by 20+ years' experience
in joint health and mobility

**Joint health is a top health issue
for 27% of supplement users.⁸**

**77% of collagen users are
interested in branded ingredients.⁸**

A person is shown in a dynamic, almost acrobatic pose, with one leg raised high and bent. They are wearing a dark blue long-sleeved shirt, dark pants, and red and white sneakers. The background is a vibrant red on the left, transitioning to white on the right. A digital particle effect, consisting of many small red and white squares and lines, surrounds the person's legs and lower body, giving a sense of motion and technology.

Mobilee®

The first hyaluronic acid matrix ingredient for joint AND muscle health

Mobilee® is a hyaluronic acid matrix ingredient and patented extract containing hyaluronic acid (> 60%), collagen and polysaccharides.

Thanks to the synergistic effect of these three naturally-occurring components, it is possible to support joint **and** muscle health at a low dosage.

Dietary supplement and functional food innovation

Low dose (80 mg/day)

Supports joint *and* muscle health

Backed by 12 scientific studies
(including clinical data in healthy subjects)

- Solid regulatory framework – Novel Food (EU Commission), New Food Raw Material (China) and self-affirmed GRAS status
-

- Backed by 20+ years' experience in joint health and mobility

40% of consumers regularly seek mobility-supporting products.⁷



Tendaxion®

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For tendon health

Tendaxion® is a science-backed solution for tendon health and recovery. It contains a specific formula of mucopolysaccharides (MPS) and collagen, which helps to maintain the biochemical properties of the tendons.

Tendaxion® may be used in combination with physical exercise in individuals experiencing a tendon injury that results in pain, reduced ability to exercise and functional disability.

Dietary supplement and functional food innovation

520 mg/day dose

Recommended with 60 mg vitamin C

Supported by robust scientific evidence

30-50% of sports-related injuries are tendinopathies.⁹

15-30% of tendinopathies are caused by workplace activities.⁹



CSbioactive®

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For healthy joints

CSbioactive® is a science-backed, high-quality chondroitin sulfate for joint health. Supported by a robust body of scientific evidence, it is used as a reference ingredient worldwide.

Dietary supplement innovation

800-1,200 mg/day (US) dose

Proven efficacy and safety

Backed by 20+ years' experience
in joint health and mobility

**47% of people globally say they
experience joint discomfort.¹⁰**

Skin & beauty

A new era in health is here - one where beauty meets nutrition

Revitalise your product portfolio and attract a new generation of consumer by tapping into the growing nutricosmetic trend.

The nutricosmetic market is expected to grow at 9% CAGR 2021-2030 and skincare holds the major share (61.63%).¹¹



Dermial®

Dermial®

The first hyaluronic acid matrix ingredient for beauty-from-within

Dermial® is a unique hyaluronic acid matrix ingredient obtained through a proprietary manufacturing process, that ensures a high concentration of hyaluronic acid (> 60%), plus collagen and a balance of other glycosaminoglycans, including dermatan sulfate and chondroitin sulfate.

It brings powerful regenerative and moisturising properties to help maintain the health and nutrition of skin – creating opportunities for nutricosmetic brands to unlock beauty-from-within.

Nutricosmetics and functional food innovation

Demonstrates unique glow effect; supports hydration; reduces wrinkles

Promotes HA, collagen and elastin production

Low dose 60 mg/dtday

Supported by five studies (including clinical data)

Novel Food (EU Commission), New Food Raw Material (China) and self-affirmed GRAS status

66% of consumers recognise the link between skin health and overall well-being. 59% want to improve skin health.¹²



Digestive health

There is rising demand for digestive health products due to growing awareness of the link between gut health and overall health, increased knowledge of the gut microbiome and rise in digestive health concerns.

40% of global consumers say digestive issues impact their quality of life.¹³



DAOgest

Make histamine intolerance history with DAOgest

Histamine is naturally produced in the body, but is also present in a wide range of foods and beverages. Histamine intolerance is associated with impaired dietary histamine metabolism.

This is usually due to low diamine oxidase (DAO) enzyme activity and/or DAO deficiency – leading to an imbalance between histamine intake and histamine degradation and can trigger allergy-like effects.

An effective digestive health supplement extracted from porcine kidney, DAOgest provides high-quality DAO enzyme to support with the management of histamine intolerance. It works by...

- 1 Degrading histamine ingested from food and beverages
- 2 Contributing to decreased histamine levels
- 3 Helping to manage the effects associated with histamine intolerance

Premium ingredient for digestive health supplements

4.2 mg/serving/day

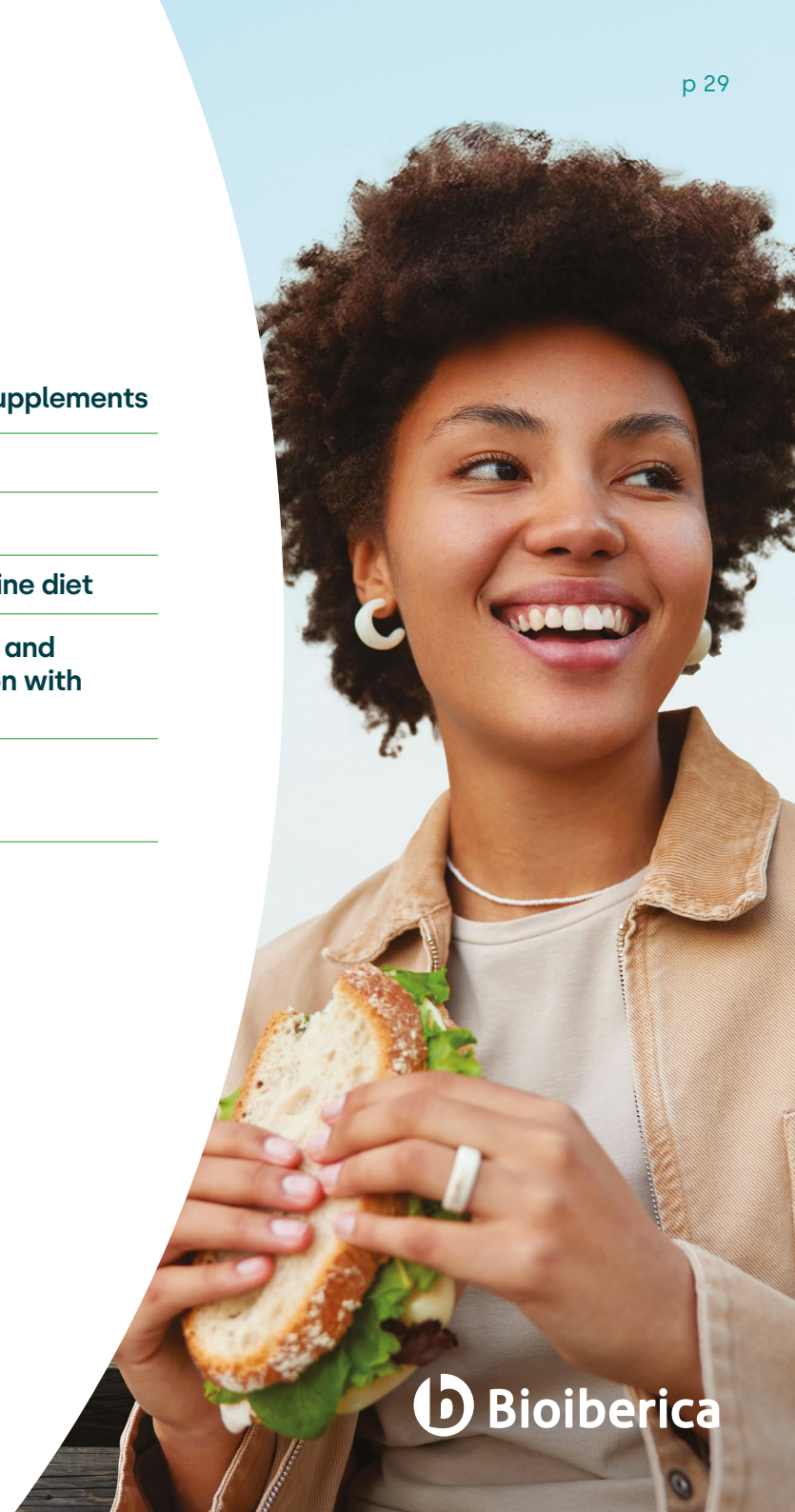
Supported by four studies

Complementary solution with low histamine diet

Demonstrates greater enzymatic activity and histamine-degrading ability in combination with vitamin C

Novel Food (EU Commission) and Dietary Ingredient (US)

Histamine intolerance affects 1-3% of the global population.¹⁴



A pipeline of possibilities

We add value by providing comprehensive formulation support and leveraging deep research and development expertise to continuously explore and develop new products.

By staying at the forefront of innovation, we actively expand our pipeline to meet evolving customer needs, ensuring that our solutions remain cutting-edge and responsive to market demands.

We increase our investment in R&D every year to develop new molecules, active ingredients and ingredients in partnership with international strategic partners.



We are all one

At Bioiberica, we champion health for all. We understand that the health of humans, animals and plants is interconnected and for life to thrive in harmony, we must support all ecosystems.

That's why we embrace the concept of "One Health". Every one of our research ventures, innovation projects and business goals aligns with one aim; to nurture life through a scientific lens. This ethos inspires everything we do, weaving purpose into every step we take.

For over 50 years we've been supporting health for all by:

- Championing a circular economy for sustainability
- Pioneering science to drive innovation
- Trusted quality & safety standards



Human Health

Since 1975, we have been developing naturally sourced molecules with high therapeutic and nutritional value that support human health and wellness.



Animal Health

We create scientifically proven solutions to improve the health and quality of life of companion and production animals, with a commitment to science, welfare and sustainability.



Plant Health

We contribute to the advancement of more efficient, resilient and environmentally friendly agriculture by delivering sustainable solutions that help overcome plant stress and improve crop yield and quality.

References

1. Bioiberica Sustainability and Climate Strategy report.
2. Zang, Zhu, Wang, Liu, Yu and Zhao. Not Just Anticoagulation—New and Old Applications of Heparin. *Molecules*, 2022;27(20):6968.
3. Banik, Yang, Kang, Lim and Park. Heparin and Its Derivatives: Challenges and Advances in Therapeutic Biomolecules. *Int J Mol Sci.*, 2021;22(19):10524.
4. Chiovato L et al. Hypothyroidism in context: Where we've been and where we're going. *Ad Ther.*, vol. 36, pg. 47-58, 2019.
5. FDA's actions to address unapproved thyroid medications: Medications for treatment of hypothyroidism.
6. GBD 2021 Osteoarthritis Collaborators. Global, regional, and national burden of osteoarthritis, 1990–2020 and projections to 2050: a systematic analysis for the Global Burden of Disease Study 2021. *The Lancet*, vol. 5, pg. e508-e522, 2023.
7. FMCG Gurus, Mobility Health, 2024.
8. ITC Insights. Consumer Supplement User Survey, Collagen Category Report, 2022.
9. Trauma Fund MAPFRE, 2011;22:12-21.
10. FMCG Gurus, Joint Health, 2018-2019.
11. Straits Research, Global Nutricosmetic Market Size, Demand, Forecast to 2030 Report, 2021.
12. FMCG Gurus, Healthy Ageing: Skin Health Global Report, 2022.
13. FMCG Gurus, Digestive Health Surveys, 2018–2020.
14. Comas-Baste. *Biomolecules*, 2020;10:1181.



Empowering the health evolution

Curious by nature, we are always eager to explore new horizons in the human health market.

These statements have not been evaluated by the Food and Drug Administration or other competent food authorities. The product is not intended to diagnose, treat, cure, or prevent any disease. This information is only for business-to-business use and not meant to be addressed to final consumers. Therefore, Bioiberica assumes no liability for the statements that the producer of the final product may include in its own publicity to consumers.

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opportunity with us.**

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