

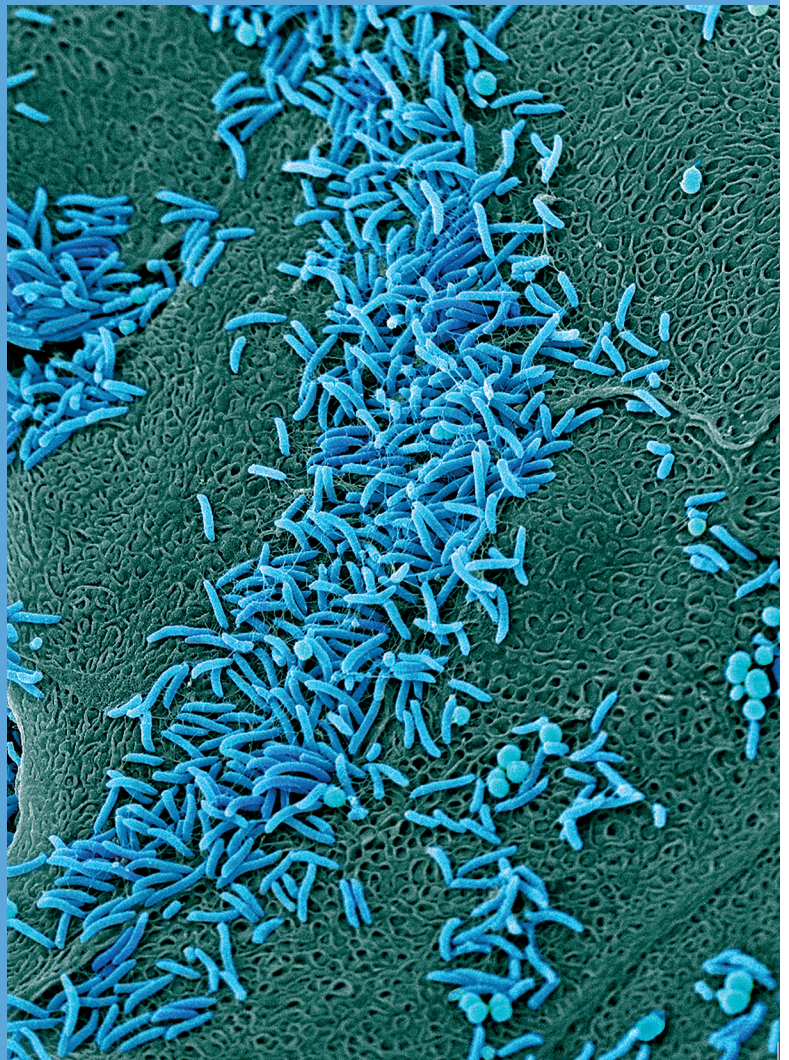
Company Profile

Surfing together the Probiotic Galaxy



A noble purpose carries the soul of a company, it lights a strategic beacon that drives the business, it stimulates the commitment and passion of those who work in that company and encourages continuous innovation.

Giovanni Mogna – Probiotal Founder





Index

6 *Who we are*

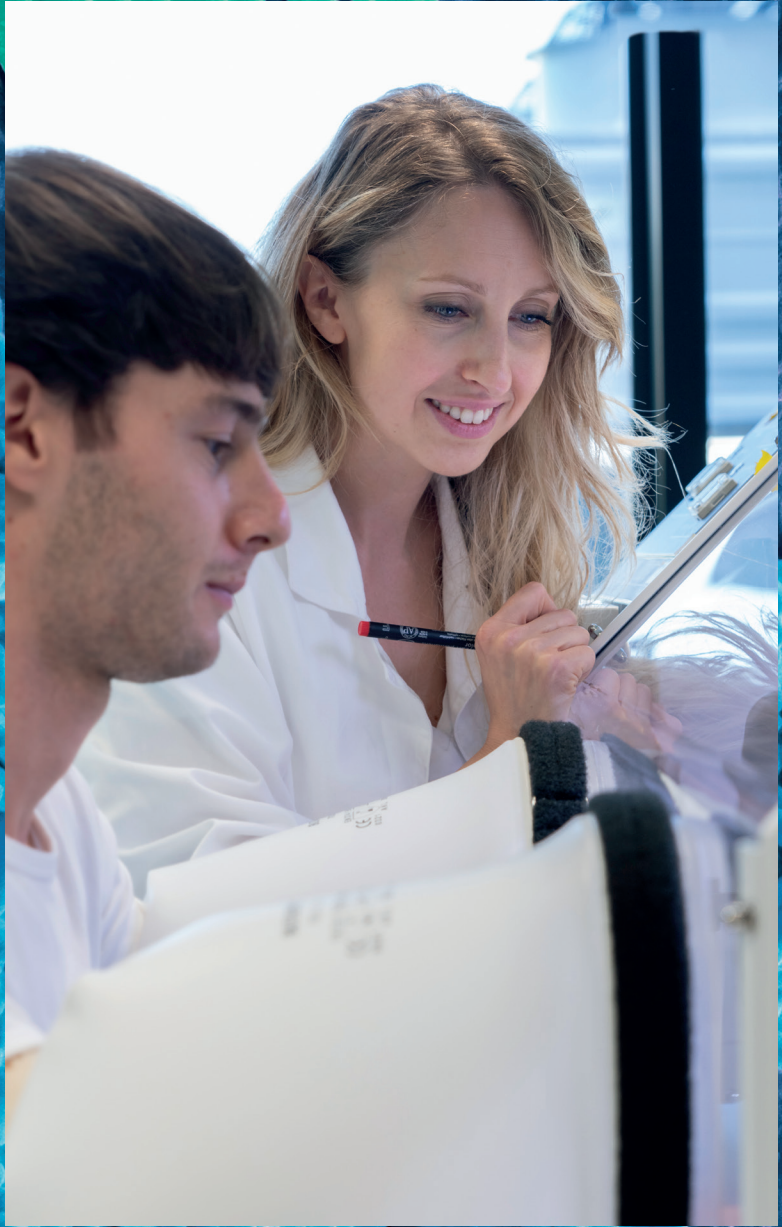
9 *Vision & Mission*


10 *Our Ecosystem*

16 *At the service
of our customers*

22 *Probiological Skin Tech*

26 *Market
and Technology*





We create
innovative
probiotics with
a proven positive
impact on life,
thanks to a
deep integration
of research
and production

Who we are

A GROUP OF EXPLORERS OF AN INVISIBLE WORLD

*The drive for innovation
and research is in our very DNA.
We work to preserve and improve
well-being through probiotic bacteria.*

We are a group of researchers and innovators who, through probiotics, want to provide natural solutions to make people live better, in perfect harmony with one's body and its complex nature.

The current company originates from ALCE, a dairy business founded in Novara, Italy, in 1950. Probiotical was an idea of Giovanni Mogna who, driven by a great passion and interest in anything related to health, had the intuition to exploit the expertise acquired in the fermentation of strains for dairy purposes to develop strains for human health.

To this end, since the very year it was founded, 1985, Probiotical undertook a period of in-depth research work on probiotic strains of human origin, on optimising production processes to manufacture them and on identifying increasingly specific and targeted activities such strains could have on human health, which lasted for over 10

years and which has allowed to create one of the largest and science-backed probiotic strain databases available.

A major turning point, which led to the fast growth of the company, occurs between 2010 and 2015, when Probiotical decides to offer its services both as a producer of raw materials and of finished products.

Our history shows we have grown strong in Italy, yet we thrive all over the world today. We see the prospects and strive to go beyond borders. We enjoy exploring opportunities, taking up challenges, seeking new partners and companions for this journey of ours.

Thanks to strong corporate ethics based on the due respect for our employees and their families, we have created an ideal workplace, an atmosphere of serenity that is reflected in the superior quality of our products and the excellent relationships with our customers.

We stand out thanks to a philosophy based on the development and manufacturing of finished products made through the latest technology and strong scientific research, determined to be seen as the ideal partner for any food, nutraceutical and pharmaceutical manufacturers that are seeking probiotic and/or symbiotic products.

We are a company built by four generations of a family of entrepreneurs and, above all, researchers. We have always invested with passion, courage and ambition in the future, with the strong belief that research work is what drives growth.

Our history

1950

The solid roots to build a great future

The ALCE microbiological laboratory is founded, which will remain the Italian leading company in the production of lactic bacteria for the dairy industry for over seventy years. Mario Mogna, the founder, will be remembered especially for pioneering direct liquid inoculation into the boiler.

1985

A new point of reference in the industry

The knowledge and expertise gained from the background to successfully approach new application sectors: Giovanni Mogna founded Probiotal on these basis, focusing work on research and development in the early years of the company, and on design and implement of the first production processes.

2000

Research and innovation to face new challenges

Research work continues to identify the beneficial activities of probiotic strains in a wide number of therapeutic areas, to then validate such benefits through clinical trials carried out at major Italian and European research centers. In these years, Probiotal also works to perfect production processes.

2022

The new Probiotal Skin Tech business unit is founded

Probiotal Skin Tech is the new business unit dedicated to the cosmetic and personal care industry. Probiotal unites state-of-the art microbial technology with a broad expertise in probiotics to pioneer new applications.

TODAY

An Italian company growing strong worldwide and constantly investing in innovation: new probiotic strains, new clinical studies, new facilities.

Vera Mogna introduces Probiotal into new market scenarios, by increasing the production of finished products and exploiting partnership opportunities, keeping the focus on constant innovation and strong research and development. Under her guide the company obtains important results, confirmed by the achievement of a number of patents and certifications.



We experiment
and innovate
in the world
of probiotics

WE OFFER SOLUTIONS FOR IMPROVING PEOPLE'S QUALITY OF LIFE

We develop some of the most innovative probiotics in terms of activity and health applications - a range of natural solutions to foster well-being.

In our work, we strive to enhance research and development in the field of probiotics and, more generally, of the microbiota, to create cutting-edge, high quality, effective, safe raw materials and finished products in a branch of nutraceutical science that requires specific technical expertise.

Continuous development is our major goal, as we do not like to rest on the results we have achieved, but we rather wish to stretch to reach the very boundaries, explore the hidden perimeters of the world of probiotics and grow in new experimental market niches.

Every year we produce some of the most innovative probiotics: raw materials and formulations that we have studied with the aim of putting people, their needs and their aspirations for an ever better quality of life at the center of our activity.

We achieve results through co-operation with our customers, who grow with us over time to become true business partners of ours. Each new product and formulation breakthrough stems from the great passion for science and innovation that drives us, which allows to build the required expertise Probiotical puts at the service of customers, but also of the scientific community, thanks to research work we disseminate and often publish in the literature.

We integrate research with production to create products that are the result of experimentation, thorough investigation and accurate testing.

A SYNERGIC ECOSYSTEM DEVOTED TO EVOLUTION AND DISCOVERY

Probiotal stands as a unique enterprise in the probiotic sector. In fact, it boasts the first plant in the world specifically designed and built for the research, development and production of probiotic microorganisms.

We work to create probiotic-based raw materials and products for innovative therapeutic applications, to meet the needs of the ever-growing healthcare market.

We work through an integrated product development chain in which the synergistic efforts of technicians and scientists, from concept design to final production, allow to yield products that meet the highest standards in terms of quality and stability.

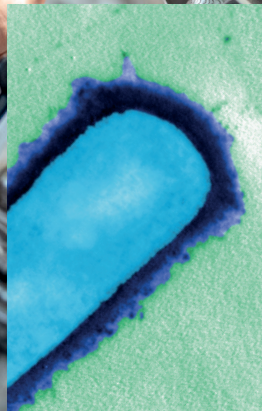
Product development is a complex process that is carried out entirely in our research & development and manufacturing facilities, through systems based on state-of-the-art technology we have developed ourselves.



Production

An advanced industrial complex where we work on the selection of our probiotic strains, develop the clinical testing, freeze-dry, mix and package our preparations.

9.000
square meters
of production space



Research and Development

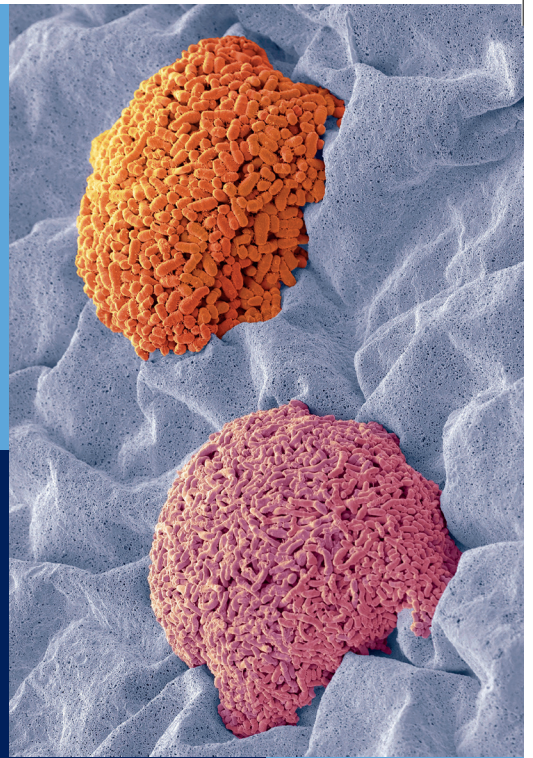
Within the industrial complex, we have a large area devoted to R&D – a unique and innovative plant where we carry out our technical-scientific investigation work, and which enables us to isolate and test our probiotic strains, as well as design the clinical studies we carry out on them.

1.200
square meters
of R&D space



60+

Strains currently in production



We push ourselves to seek unexplored worlds

Our adventure into the future of probiotics to meet the needs of a constantly evolving market

2.000

Strains available in our collection

Research and Development

Our work is driven by the urge to discover. To this end, Probiotal's research and development unit plays a crucial role and is the true engine of the company - up to 10% of our turnover is invested in research, patent and innovation.

Research aims at the selection and investigation of new probiotic microorganisms, identified for their specific beneficial properties. Our researchers are constantly engaged in both basic and applied research. Basic research has the objective of discovering probiotics having different types of activity, while applied research focuses on the design of effective products, in which probiotic properties are guaranteed up to the product expiry date.

Product design is based on research to identify prebiotic fibers that allow to optimise the development of probiotic cultures, the biocompatibility of the strain with other active components or excipients of the formulation and the efficacy and stability of the finished product.

The Probiotal laboratories are a unique and stimulating workplace, where our researchers use their creativity and great skills to design unprecedented solutions. Our spirit to explore and the regular investments we make have led us to build a large bank of proprietary probiotic strains and secure patents on formulations, production technologies and preservatives systems.

Each microorganism has been taxonomically classified, assessed for its resistance to antibiotics (as required by the official EFSA guidelines) and registered in international culture collections to ensure traceability and patentability.

All our research and development activities are backed by rigorous studies, which are published in the most important international journals pertaining to our sector.

GASTROENTEROLOGY

IMMUNOLOGY & ALLERGOLOGY

DERMATOLOGY

HEALTHY AGEING

BONE HEALTH

CARDIOMETABOLIC

GYNAECOLOGY

UROLOGY

NEUROLOGY

OPHTHALMOLOGY

SPORT

ORAL CARE

Tailor-made and specific products for different therapeutic areas

We have developed innovative formulations whose benefits are not just limited to rebalancing the intestinal microflora. Each individual probiotic strain has its own, unique properties, tailored to suit certain applications, and whose effectiveness is demonstrated by scientific and clinical studies.

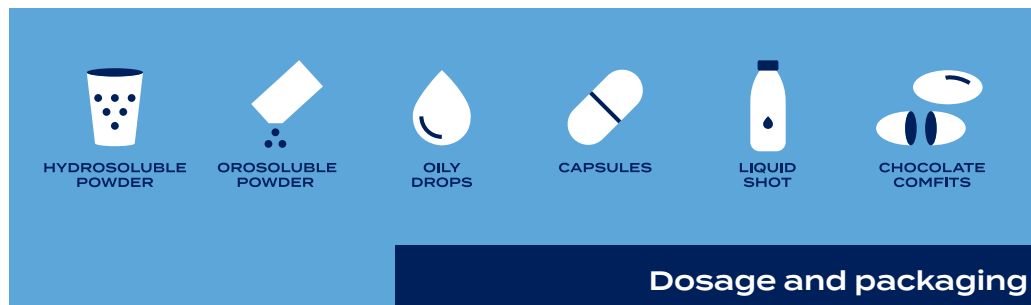
WE STAND BESIDE OUR CUSTOMERS TO PRODUCE EXCELLENCE

Our production processes undergo continuous optimisation to improve product performance all the time.

At Probiotal, we manage the entire production process in our plants. From product design to the finished product, the manufacturing cycle is 100% in-house, comprehensive, safe and occurs through the following phases:

- **Fermentation**
- **Freeze-drying**
- **Microencapsulation**
- **Production and packaging of the formulation**

The strong expertise of the Probiotal production team, supported by smart solutions devised by our research and development staff, has led to creating specific technologies that allow to preserve the vitality of probiotic cells throughout the duration of the production process and, subsequently, for the entire duration of the shelf life of the product



Our strains

Among the strains we manufacture, a number of these are designed to have benefits for human health, while other strains are developed to be particularly active against specific pathogens.

Examples of these strains and their beneficial effects are:

Improvement of **gastrointestinal discomfort**, stool consistency and healthy intestinal microflora

Maintenance of **healthy cholesterol** levels and normal blood glucose to support weight management

Production of specific **group B vitamins** (folic acid, cobalamin, vitamin b12)

Rebalance and maintenance of a healthy gastrointestinal microflora in colicky infants

Modulation of immuno responses to help with **seasonal allergies**, support **healthy respiratory function** as well as **skin health**

Strains having specific benefits

In compliance with GMP (Good Manufacturing Practices) guidelines, Probiotal has been authorised by the Italian Ministry of Health to manufacture active ingredients and food supplements.

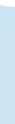
In addition, we have also been authorised by AIFA (Italian Medicines Agency) to manufacture API (Active Pharmaceutical Ingredients) strains, supported by the appropriate DMF (Drug Master File) documentation.

At the service of our customers

From R&D to raw materials and finished products

Probiotal manages a complete allergen free manufacturing process from strain isolation to raw materials and finished product.

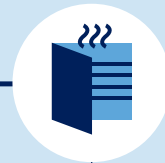
MICRO-ENCAPSULATION
Proprietary technology



**STRAINS
ISOLATION**

FERMENTATION

FREEZE-DRYING



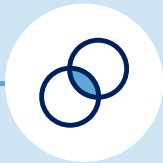
*Industrial
fermentation area*



*Pharmaceutical
freeze-drying area*



*Research centre
and laboratories*



**SINGLE STRAINS
& BLENDED
FORMULA**



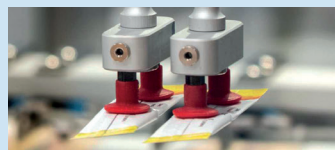
**IN VITRO
AND CLINICAL
TESTING**



**Single strain
raw material**



Bulk



**Finished
product**



PACKAGING

At the service of our customers

We turn insights from our customers into product ideas to develop together, yielding food supplements and medical devices, also on a private label basis.

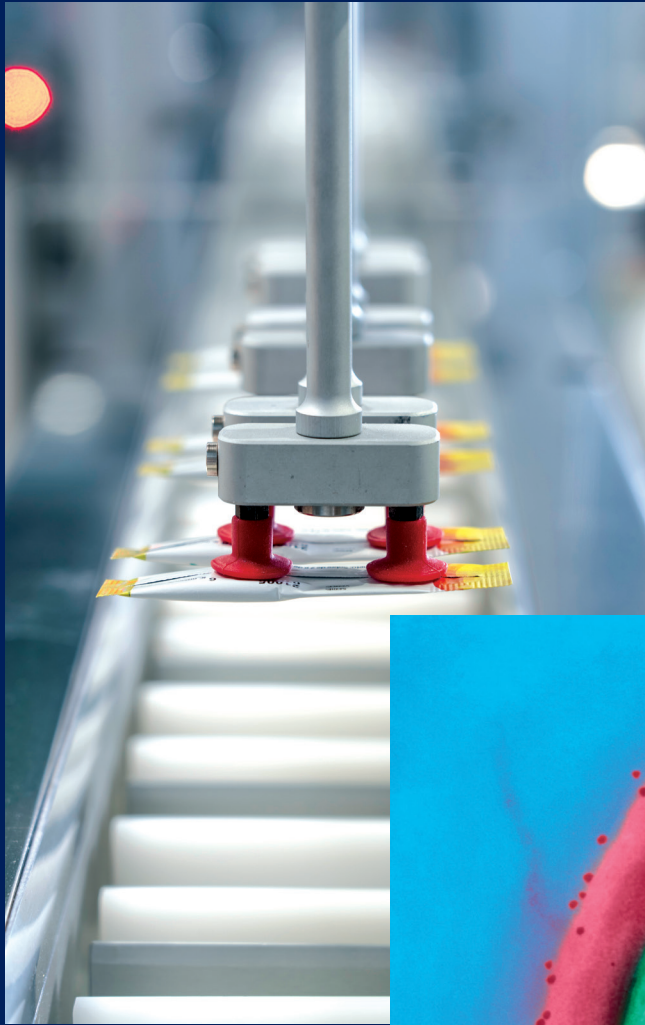
WE WORK WITH OUR CUSTOMERS TO EXPLORE NEW MARKET OPPORTUNITIES

Alongside our customers, who become true business partners of ours in the process, we create tailor-made products, developed through a process that is fully devised and shared with our partners, from product design to manufacturing strategies and identifying the ideal packaging.

We offer a broad range of active ingredients, freeze-dried probiotics at various concentrations for applications in the food, nutraceutical and pharmaceutical industries.

The following are among the services we can provide:

- production and supply of probiotic raw materials for the food and pharmaceutical markets
- production and supply of finished products based on probiotics for the food and pharmaceutical markets



*Our expertise
has allowed
us to develop a
broad range of
formulations*

Clinically Tested

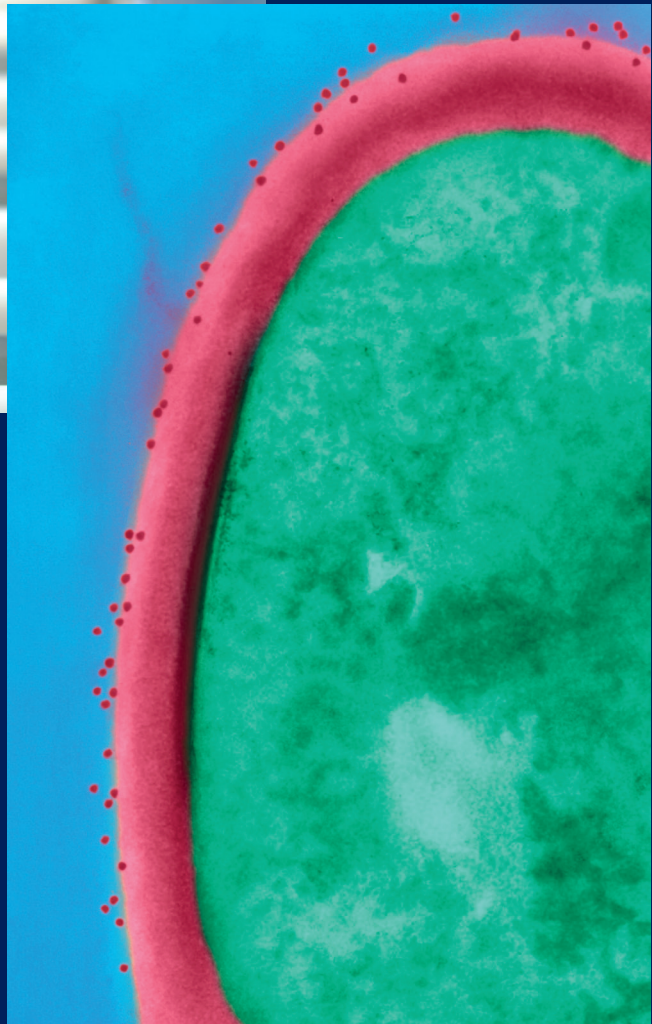
*Certified, market-ready
products.*

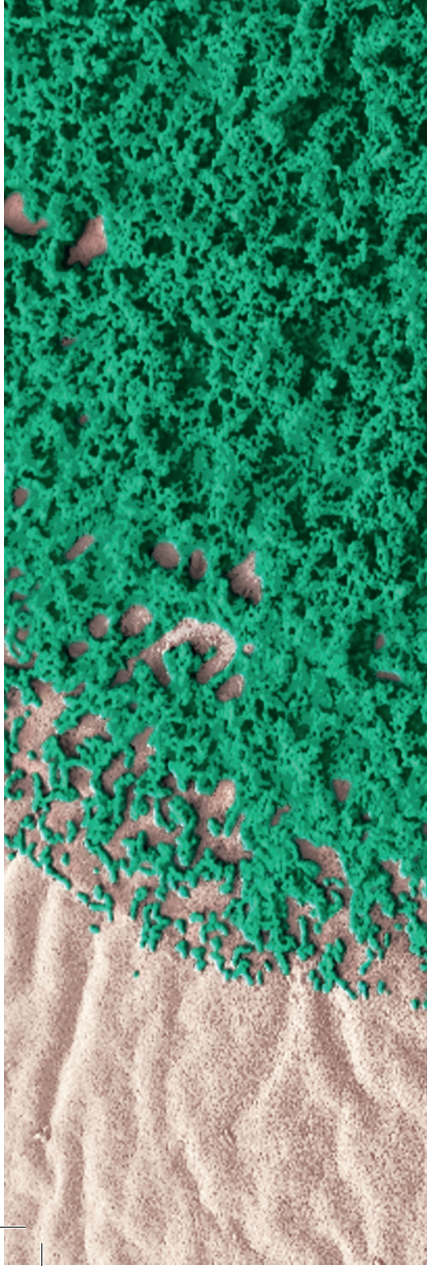
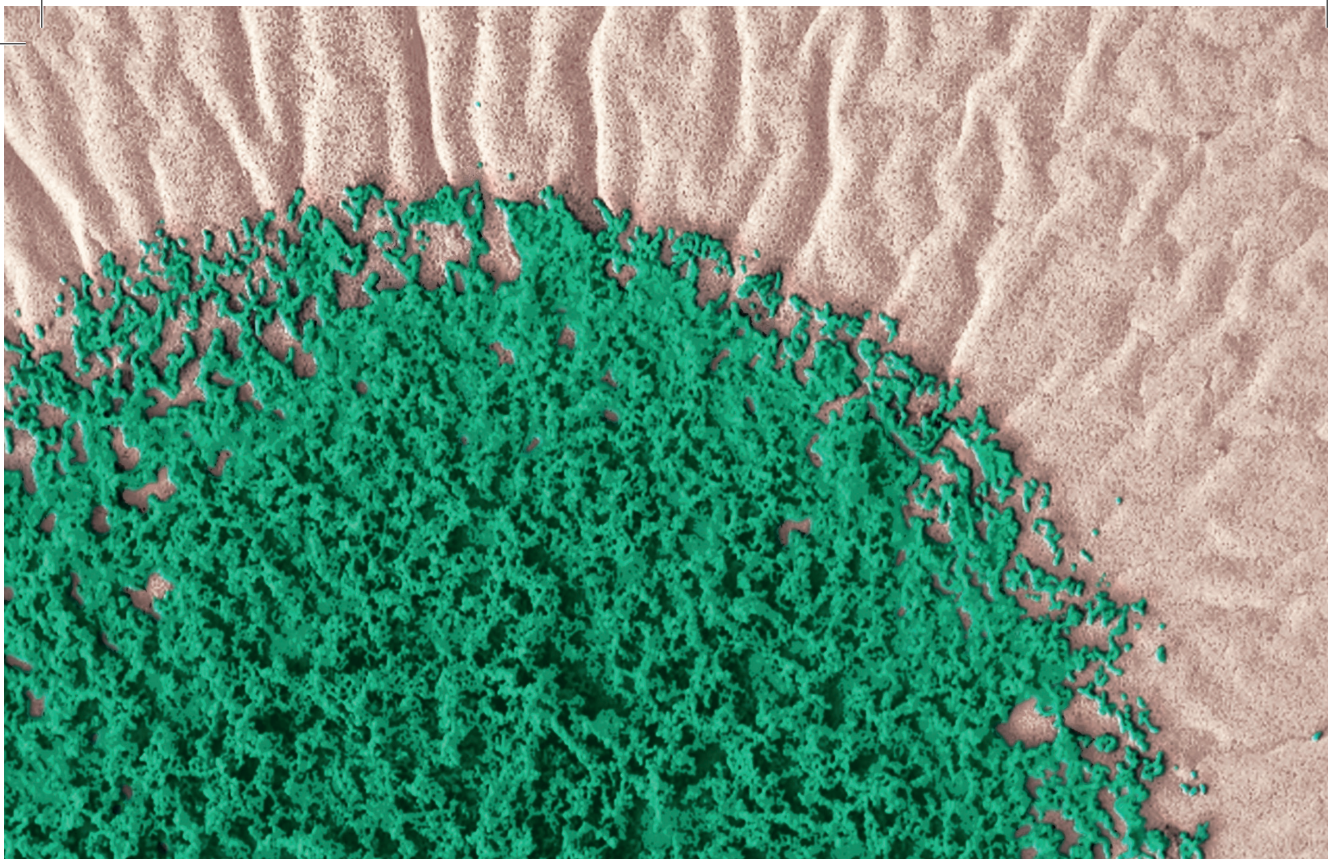
Developed Formulas

*Products made
through state-of-the-
art technology and
supported by scientific
studies.*

Tailor Made

*Customised solutions,
from product design
to packaging.*





EXPLORING A BORDERLESS WORLD THROUGH THE MICROSCOPE

Founded in Italy, we proudly like to represent the best values of our country, yet we are naturally driven to take on the world: more than 70% of our current output goes to foreign markets. Our expertise enables us to provide safe and effective products for a number of therapeutic areas, which are also scientifically proven and come with a guaranteed stability. These results are possible thanks to strong research work and the use of innovative technologies, which we have developed and patented to offer the highest possible quality to our partners.

Our technology allows us to provide effective products to anywhere in the world.



MICROBAC

Our probiotic microorganisms can be produced in a microencapsulated form, thanks to a special technology that covers every single cell and gives it gastroprotection. It allows the microorganism to reach the gut viable to perform its beneficial function.

Studies carried out on our microencapsulated strains demonstrate a colonisation capacity 5 times greater than that of standard strains.



**ALLERGEN
FREE**

Probiotical has developed a special patented technology that ensures that all the allergens indicated in the current European legislation are excluded from laboratory and production processes.

Thereby Probiotical obtains allergen-free probiotic cultures and products.


Probiotal Skin Tech

Probiotal Skin Tech is the business unit of Probiotal dedicated to the cosmetic and personal care industry, for topic applications.

Our diverse expertise in the field of probiotics has yielded **Skinbac™**

Supported by evidence from rigorous scientific testing, we see the future of cosmetics as being brighter by using precision heat-treated probiotics to preserve the health of skin and hair and enhance their beauty.

*Probiotal Skin Tech is your partner
in developing innovative cosmetic products
for skin well-being, offering Skinbac™
raw materials as single strains or blends,
as well as finished products.*

A close-up photograph of a woman with dark hair pulled back, smiling and applying a white cream to her right cheek with her fingers. The background is a soft, light blue gradient.

**Over 30 years of skin probiotics
expertise has been transferred
to Skinbac™ heat-treated strains,
for complete, tested, and guaranteed
efficacy in cosmetic products**

Probiotal Skin Tech

Skinbac™ strains are a selection of proprietary heat-treated probiotic strains.

Our proprietary heat treatment of the cells renders them non-viable and highly suited for inclusion in cosmetic formulations without any incompatibilities, including preservative systems.

The **Skinbac™** products range displays stability in aqueous formulations and with the most common preservative systems.



Skinbac™ primary applications are:

UV Damage Restoration
(as cytokines modulation)

Anti-Inflammatory / Soothing
(as cytokines modulation)

Hydration (as aquaporin expression)

Antioxidant Activity
(reduction of reactive oxygen species)

Tight Junctions / Barrier function
(induction of tight junction proteins)

Activity Against *Staphylococcus aureus* (SA)

Wound Healing

Hair Growth (as stimulation of dermal papilla cells)



Microbiota equilibrium means skin equilibrium

Rationally selected and validated postbiotic bacterial strains can be used to maintain the balance and health of all mucous membranes and the epidermis. The skin microbiota is key to supporting the function of immune and barrier systems and must be nourished and maintained in an optimal balance, to endure environmental insults with resilience.

Effectiveness you count on

Our proprietary heat treatment process, which retains the structure of the cell, allows for guaranteed and validated enumeration, unattainable with typical “ferment” and “lysate” ingredients.



From Italy to the world





Production plant and offices

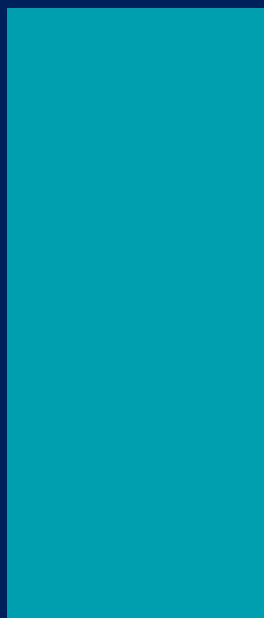


- 
- Australia
 - Austria
 - Belgium
 - Bosnia and Herzegovina
 - Brazil
 - Canada
 - Central America
 - Chile
 - China
 - Colombia
 - Croatia
 - Czech Republic
 - Denmark
 - Ecuador
 - Egypt
 - Estonia
 - Finland
 - France
 - Germany
 - Greece
 - Holland
 - Hungary
 - India
 - Ireland
 - Israel
 - Italy
 - Japan
 - Kuwait
 - Latvia
 - Lebanon
 - Lithuania
 - Macedonia
 - Malaysia
 - Mexico
 - Montenegro
 - New Zealand
 - Norway
 - Peru
 - Poland
 - Portugal
 - Romania
 - Russia
 - Saudi Arabia
 - Serbia
 - Singapore
 - Slovakia
 - Slovenia
 - South Korea
 - Spain
 - Sweden
 - Switzerland
 - Taiwan
 - Thailand
 - Turkey
 - UAE
 - UK
 - Ukraine
 - USA
 - Vietnam

Our global presence




70%
in foreign markets



30%
in Italian market



A dense, microscopic view of numerous blue, rod-shaped bacteria, likely probiotics, arranged in a complex, overlapping pattern. The bacteria are oriented in various directions, creating a textured, almost fabric-like appearance. A semi-transparent blue rectangular box is overlaid on the center of the image, containing white text.

Probiotics
you can trust
to feel well
today and better
tomorrow



*Surfing together
the Probiotic Galaxy*

probiotical.com
support@probiotical.com