

# UYN® ELEVATYON BIOMORPH





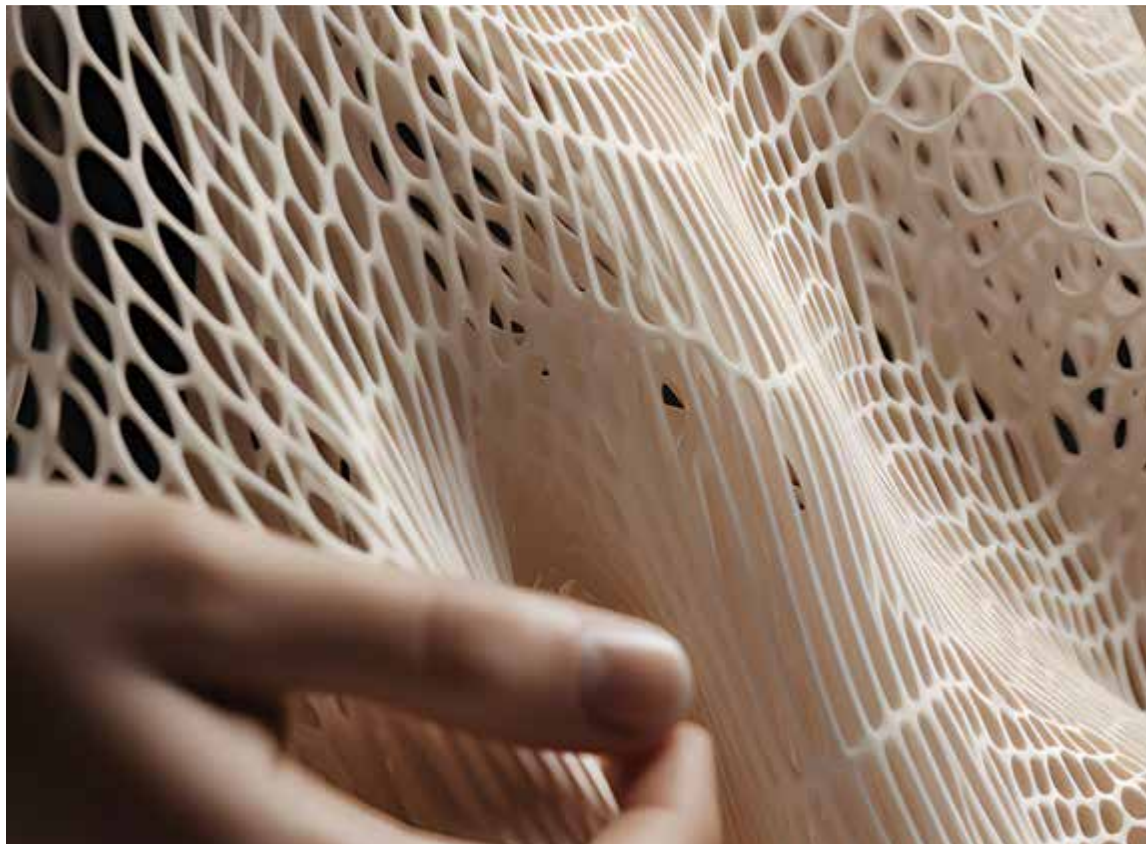
# UYN® ELEVATYON BIOMORPH RESEARCH

## THE CONCEPT

# BIO-MORPHOLOGY

*“Look deep into nature,  
and then you will understand  
everything better”*

**Albert Einstein**



## A NEW DEVELOPMENT IN FUNCTIONAL APPAREL

Man has always taken inspiration from nature to develop new inventions, overcome limitations and improve living conditions. Observation of birds led to the creation of aeroplanes, rose petals inspired high-efficiency solar panels, the study of owl wings resulted in the development of low-noise wind turbines.

This process is known as ‘biomimesis’ and consists of imitating nature’s behaviour and structures in order to create innovative and sustainable solutions.

Thanks to exclusive technologies and new-generation biomaterials, we have succeeded in optimising this biomimetic process and revolutionising the textile industry forever. Thus was born the concept of BIOMORPHOLOGY – a new evolutionary stage in functional clothing.



# UYN® ELEVATYON BIOMORPH RESEARCH

## THE POWER OF NATURE BECOMES ONE WITH YOUR BODY

BIOMORPHOLOGY is the union of two words of Greek derivation: bio and morphology.

### BIO

From the Ancient Greek *Bios*, that is, 'life', 'living being'. For us, it means using non-synthetic materials, derived from natural ingredients (cellulose, corn seeds, castor beans...) and not from fossil fuels and petrochemicals. Our bio-fibres are enhanced through biotechnology to achieve superior performance in strength, lightness, elasticity and drying speed.

### MORPHOLOGY

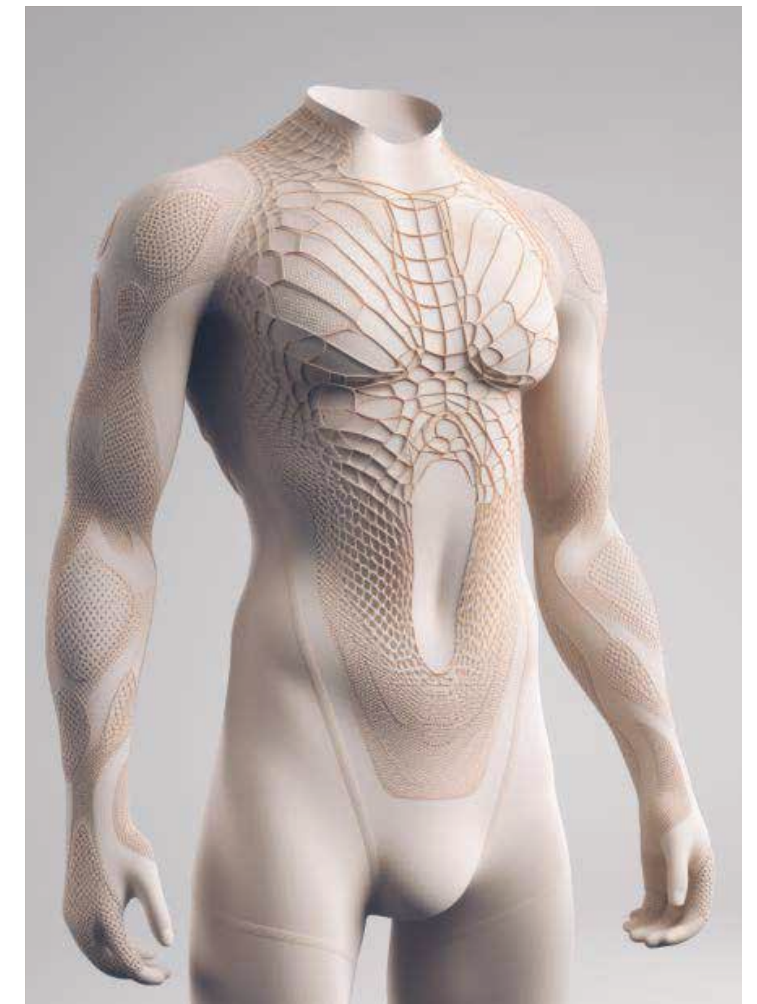
From the Ancient Greek *μορφή* (*morph*), meaning "form", and *λόγος* (*lógos*), meaning "study".

In biology, the study of the size, shape and structure of animals, plants and microorganism and of the relationships of their constituent parts.

### BIOMORPHOLOGY

A new way of thinking, designing and producing a functional garments. The three-dimensional structure, thanks to exclusive production techniques, mimics the shape and function of bones, muscles, veins, nerves, lymphatic vessels.

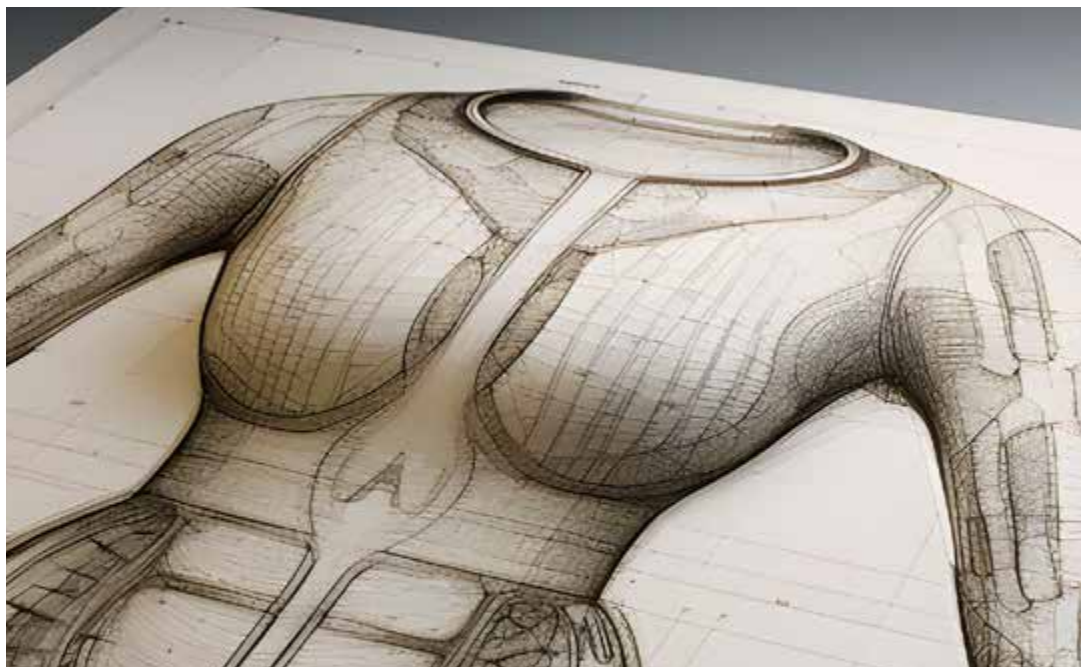
Biomorphology can be used in the creation of socks, shoes, underwear and outerwear.





# UYN® ELEVATYON BIOMORPH RESEARCH

## NATURAL INSPIRATION, ARTIFICIAL INTELLIGENCE



### THE CREATIVE PROCESS: THE NEW FRONTIER OF FUNCTIONALITY

#### CONCEPT

The creation of the 'biomorphic' garment is a bold and visionary act in which the study of nature is supported by artificial intelligence to process trillions of data. This first phase leads to the development of a radically innovative model that provides the initial inspiration.

#### DESIGN

Inspiration becomes design of product. Shapes transcend pure aesthetics and become functional structures that aim to interact with the human body to enhance performance: breathability, protection, thermo-regulation, freedom of movement, stabilisation of muscles.

At this stage, the 'biomorphic' garment is created on paper.

#### PRODUCTION

The unrivalled manufacturing know-how of our technicians makes it possible to translate design into reality. By setting new standards in three-dimensional knitting, the 'biomorphic' garment comes to life.

#### THE FINAL RESULT

The biomorphic garment features an absolute connection with the human body for performance never known before: total body-mapping. The functional areas are no longer separate, but flow into each other in a single system.



# UYN® ELEVATYON BIOMORPH

- Race-oriented performance
- Bodymapped breathability across the entire surface for rapid sweat wicking
- Advanced muscle and movement support



**HIGH  
INTENSITY  
ACTIVITY**







# YOUR SECOND NATURE

ELEVATYON BIOMORPH mimics the structures of natural organisms to boost your body's functionality. Nature is perfect, with the new technical underwear from UYN® you wear perfection. Advanced ventilation to maintain the ideal body temperature during racing and intense training; superior warming power in sensitive areas; unlimited freedom of movement to allow you to perform at your best.







# UYN® ELEVATYON BIOMORPH SHIRT

The underwear shirt made with bio-based fibres that redefines the concept of performance at low temperatures. The functional structures flow into each other creating a unique organism that elevates your body's functionality: more breathability, more insulation in sensitive areas, more elasticity and freedom of movement.

1. **HYPERMOTION**  
Zero-seam shoulder construction for absolute freedom of movement and improved muscle support.
2. **AIRSAC**  
The finer structure of the bio-fibres helps transport sweat to the outside and leaves the skin cool and dry.
3. **ISODUCT**  
Traps heated air from the body and prevents cooling of sensitive areas.
4. **BIODRY**  
The biomorphic structure of the fabric increases ventilation in the areas of highest sweating.
5. **PROCONNECT**  
The high density of the fabric concentrated in the most sensitive joint areas protects and supports movement at the same time.
6. **ULTRASTRUCTURE**  
Elastic and flexible exoskeleton that connects functional areas with each other while providing strategic support to the body.



# UYN® ELEVATYON BIOMORPH PANTS

The underpants made with bio-based fibres and engineered to boost leg function in cold temperatures. The biomorphic construction provides a natural range of motion, while refined three-dimensional technologies support the muscles and improve natural thermoregulation.

1. **ERGONOMIC WAISTBAND**  
Designed for optimal hold without constricting the abdomen.
2. **AIRSAC**  
The finer structure of the bio-fibres helps transport sweat to the outside and leaves the skin cool and dry.
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# TECHNOLOGIES

UNLEASH THE POWER  
OF SMARTER FUNCTIONS



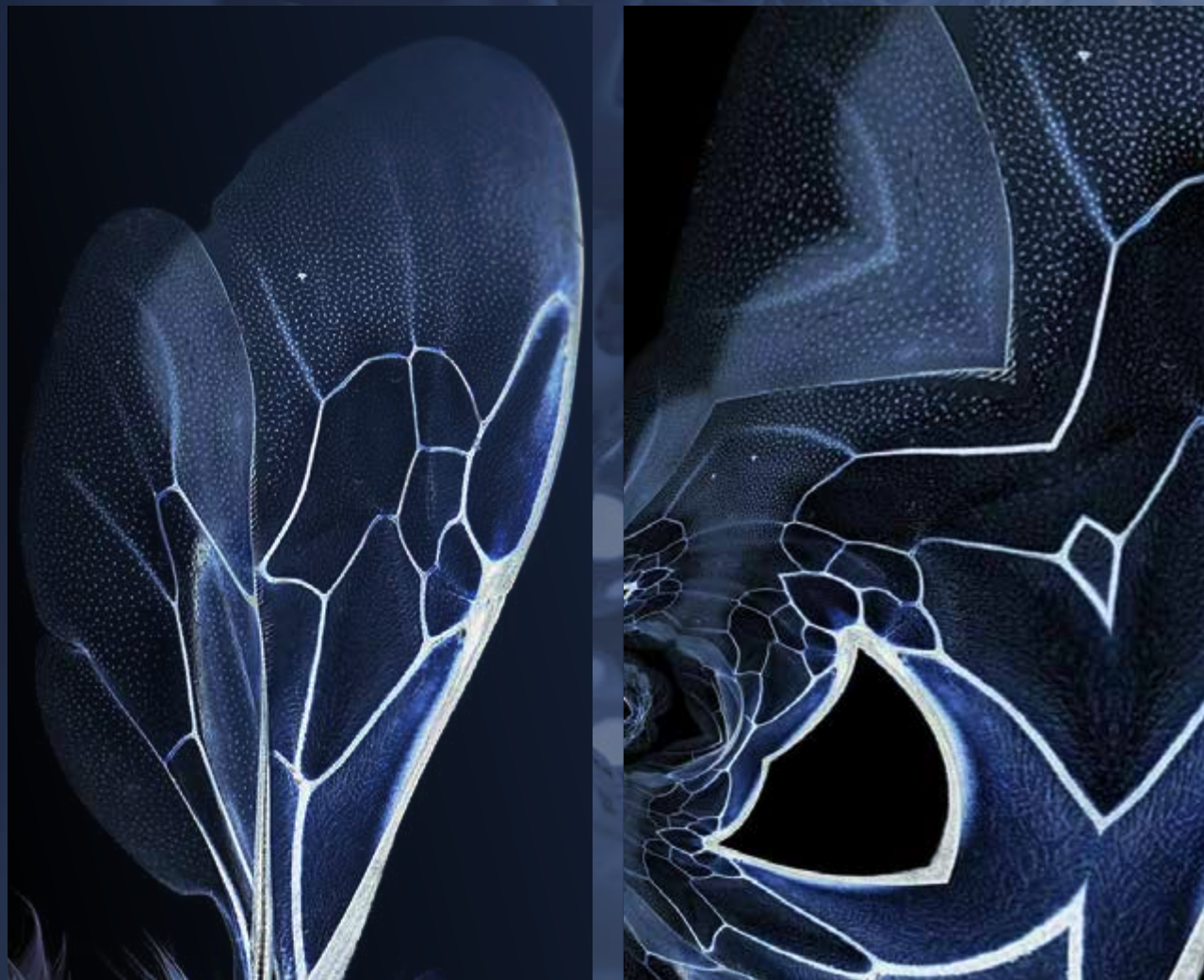


# UYN® ULTRASTRUCTURE

## SUPPORT AND FLEXIBILITY FROM WING VEINS

Inspired by the veins of insect wings, this ultra-light and flexible 'exoskeleton' provides targeted support in all areas of the body that need it, while at the same time connecting the functional zones.

Insect wings are extremely powerful in relation to their weight. The intricate pattern of veins defines their functionality and distinguishes insect types from each other.





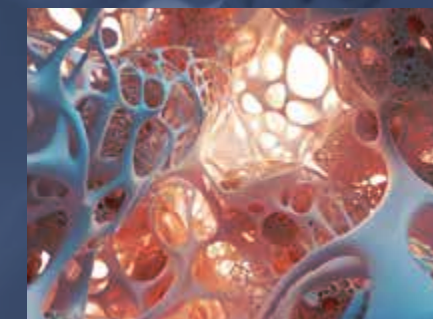
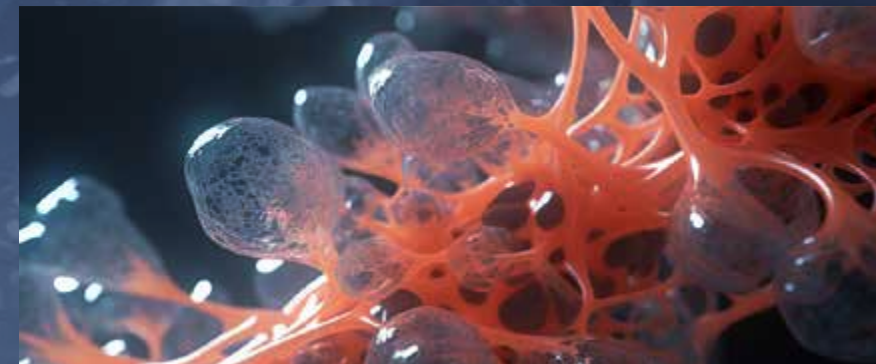
# UYN® AIRSAC TECHNOLOGY



## ALVEOLAR STRUCTURE FOR ACTIVE BREATHABILITY

The thinner structure of the knitted fabric mimics the functions of the pulmonary alveoli by facilitating the exchange of moisture produced by the body with fresh air outside for superior breathability management.

The alveoli are the smallest structures in the lungs, their function being the exchange of respiratory gases between the blood and the atmosphere. They look like small air chambers with a very thin wall.



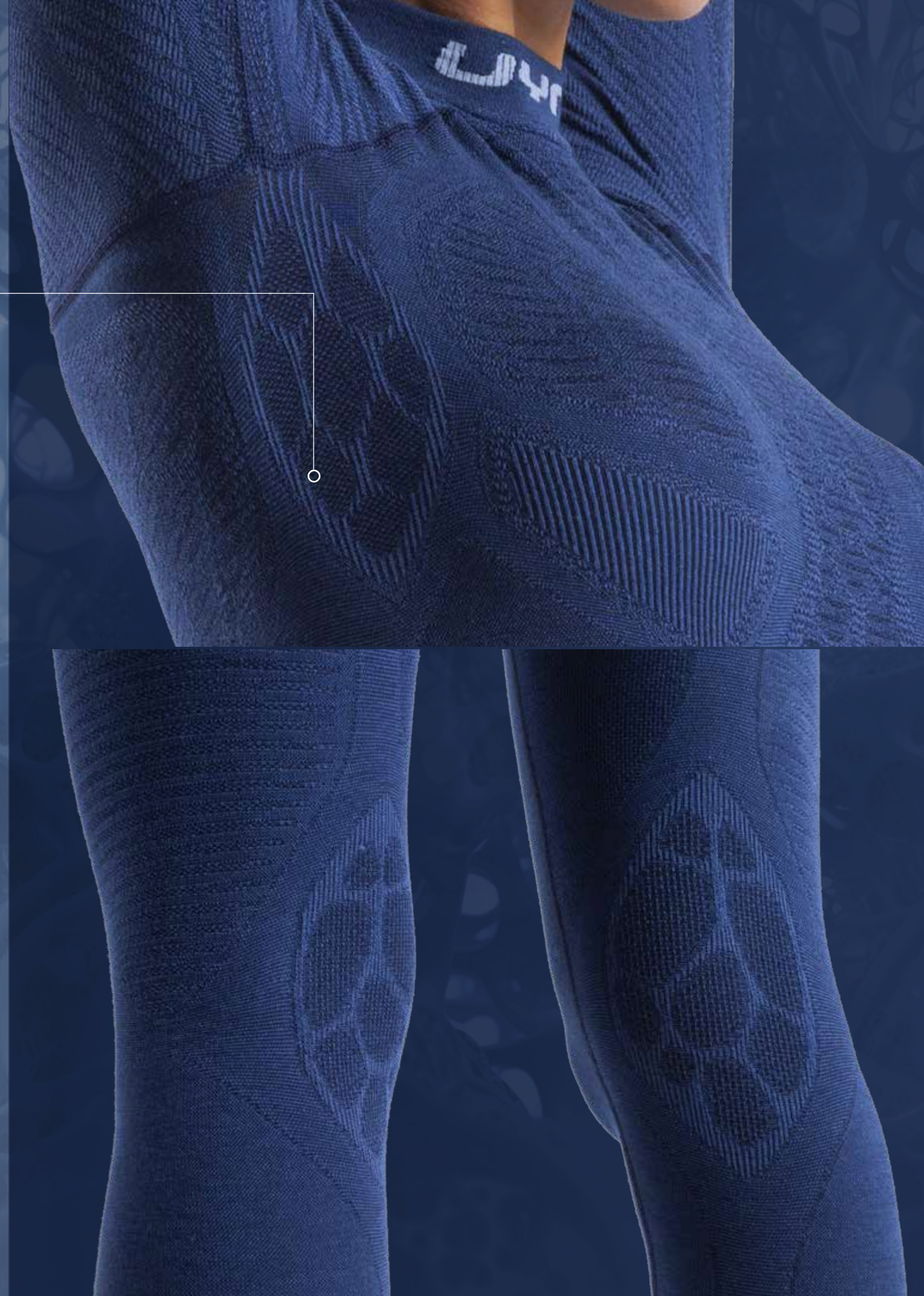
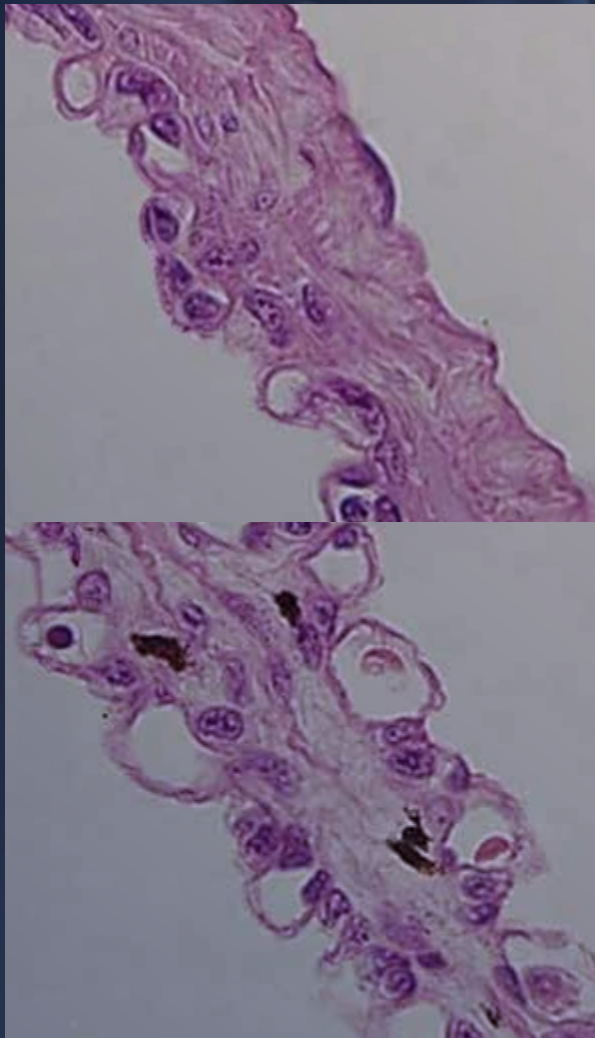


# UYN® BIODRY TECHNOLOGY

## FABRIC BREATHE IN AREAS OF HIGH PERSPIRATION

In areas where perspiration is particularly intense, Biodry technology expels sweat through fine bio-fibres and allows the skin to breathe.

The three-dimensional structure is developed by studying skin respiration in amphibians. In these cold-blooded animals, the skin is thin, highly vascularised and has numerous folds to increase surface area.

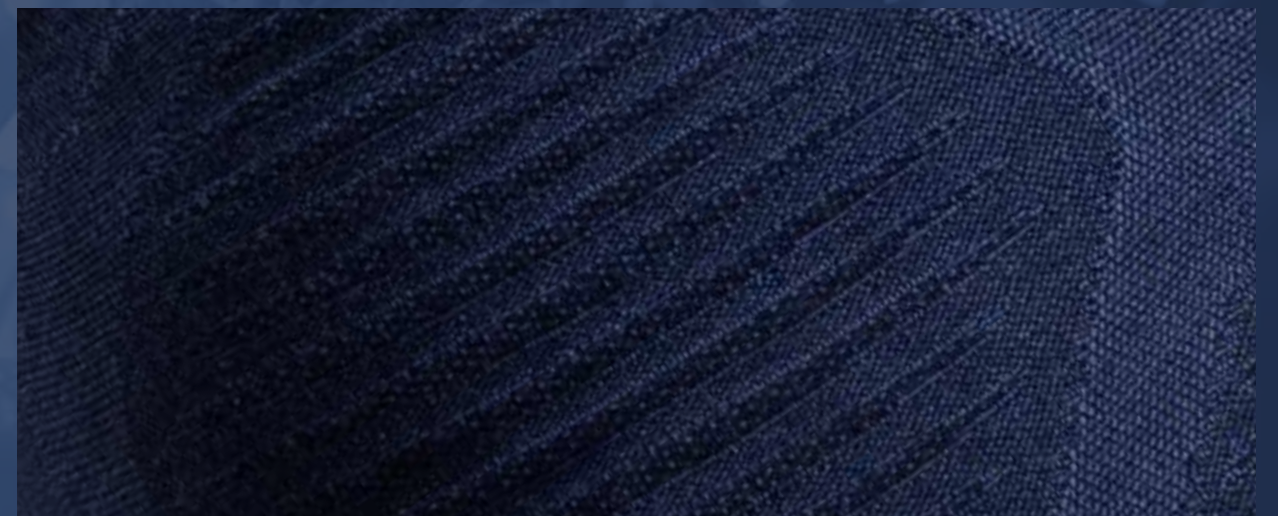




# UYN® ISODUCT TECHNOLOGY

## RETAINS HEAT AND TURNS IT INTO ENERGY

Isoduct technology targets those areas of the body that tend to cool quickly. Channels integrated in the fabric retain air in contact with the skin, so it warms up through body heat and creates a protective layer to the outside.



The principle of Isoduct technology is inspired by the fur of arctic animals. The hairs create pockets that trap air, which is the most powerful insulator in nature, and protect against the cold.





# UYN® PROCONNECT TECHNOLOGY

## JOINT-PROTECTING STRUCTURE

Like the connective tissue of cartilage that protects joints from shock and promotes movement at the same time, Proconnect technology provides greater strength in the most exposed areas without affecting the elastic characteristics of the fabric.





# UYN® HYPERMOTION TECHNOLOGY

## ABSOLUTE FREEDOM OF MOVEMENT

The shoulder area is made of a single piece of fabric, with no vertical seams. More freedom of movement, greater support for muscles and for body posture.





# BIO-MATERIALS

DERIVED FROM NATURE  
EMPOWERED BY TECHNOLOGY



## KAPOK

Known as 'vegetable wool' for its extraordinary lightness, kapok is a hollow fibre composed of 80% air.



## BIOLIGHT

Derived from beech wood Biolight is characterised by its breathable properties and its ability to retain moisture (twice as much as cotton).



## ECOLYPT

The wood obtained from Eucalyptus trees becomes Ecolypt, a 100% sustainable fiber with exceptional properties.



## ARIACEL

Derived from cellulose, it dries quickly and provides a pleasant feeling of freshness.



## THE WORLD'S LIGHTEST NATURAL FIBRE

KAPOK is a hollow fibre composed of 80% air, with a very low density (0.35 g/cm<sup>3</sup>). Because of this, Kapok is the lightest natural fibre in the world.

## NATURALLY INSULATING

The structure allows the KAPOK fibre to trap a large amount of body-warmed air thus creating an insulating barrier that protects against temperature changes.

## SOFT AND HYPOALLERGENIC

High-quality and soft, it dries quickly, is hygroscopic and has natural antibacterial and hypoallergenic properties.

## TOTALLY ORGANIC

KAPOK fibre grows wild in pristine forests, no intensive cultivation is required and the fiber is harvested by hand. No fertilizers or pesticides are used in its cultivation.

# KAPOK

## THE VEGETABLE WOOL

Nature never fails to amaze us. Nature gives us KAPOK, a precious and totally organic fibre obtained from the fruit of the Ceiba Pentandra, a sacred plant that grows up to 60 metres high, widespread in the rainforests of South America.

Known as 'vegetable wool' for its extraordinary lightness, KAPOK fibre has only recently been used in the textile industry for padding cushions and mattresses. We at UYN were the first to succeed in using the natural yarn in sportswear - as a fabric with exceptional active properties and not as padding.

**HOLLOW-STRUCTURE FIBRE  
MADE 80% FROM AIR**





# BIOLIGHT

## BEECH FIBRE, DURABLE AND BREATHABLE

BIOLIGHT is a plant-based fibre that gives UYN garments unique characteristics. Derived from the cellulose of beech plants, this fibre is smooth, soft and bright, and provides an extremely pleasant touch.

BIOLIGHT is characterised by its breathable properties and its ability to retain moisture (twice as much as cotton). Thanks to its structure, BIOLIGHT fabric helps to keep the skin cool and dry.

### DERIVED FROM BEECH WOOD

Extracted from the beech tree from responsibly managed forests.

### 100% BIODEGRADABLE

Born from nature, returns to nature.

### SUPERIOR PERFORMANCE

Retains twice as much moisture as cotton, is pleasantly soft and light.





# ECOLYPT

## EUCALYPTUS WOOD HAS NEVER BEEN SO COMFORTABLE

The wood obtained from Eucalyptus trees becomes ECOLYPT, a 100% sustainable fiber with exceptional properties. The characteristics of the pulp of the wood from which it is obtained give ECOLYPT strength and great elasticity.

Its structure is composed of very small hydrophilic fibers that absorb up to 50% more moisture than cotton. In addition, the fiber is highly breathable, minimizes the formation of odors and thanks to its temperature regulating properties is able to provide a cooling effect in hot temperatures and warm in cold days.

The entire production process of ECOLYPT fiber is characterized by a closed loop: all water and enzymes are recovered and reused in a further production process.



### DERIVED FROM EUCALYPTUS TREE

Sustainably sourced from the Eucalyptus tree.

### 100% BIODEGRADABLE

Born from nature, returns to nature.

### BREATHABLE

Thanks to very small hydrophilic fibres, it absorbs a large amount of moisture so that it evaporates faster.





**ARIACEL COMES  
FROM THE CELLULOSE  
FILAMENTS OF WOOD  
PULP**

IT COMBINES THE  
COMFORT OF NATURAL  
FIBRES AND THE  
FUNCTIONALITY OF  
SYNTHETIC FIBRES IN  
AN INNOVATIVE WAY

**COOLING FEEL TO TOUCH**

Thanks to its structure, ARIACEL fibre dries quickly,  
leaving a pleasant feeling of freshness on the skin.

**SHINY AND FLOWING**

This fibre has an appearance similar to silk.

**ARIACEL**

**QUICK TO DRY, QUICK  
TO MAKE YOU FEEL  
COMFORTABLE**