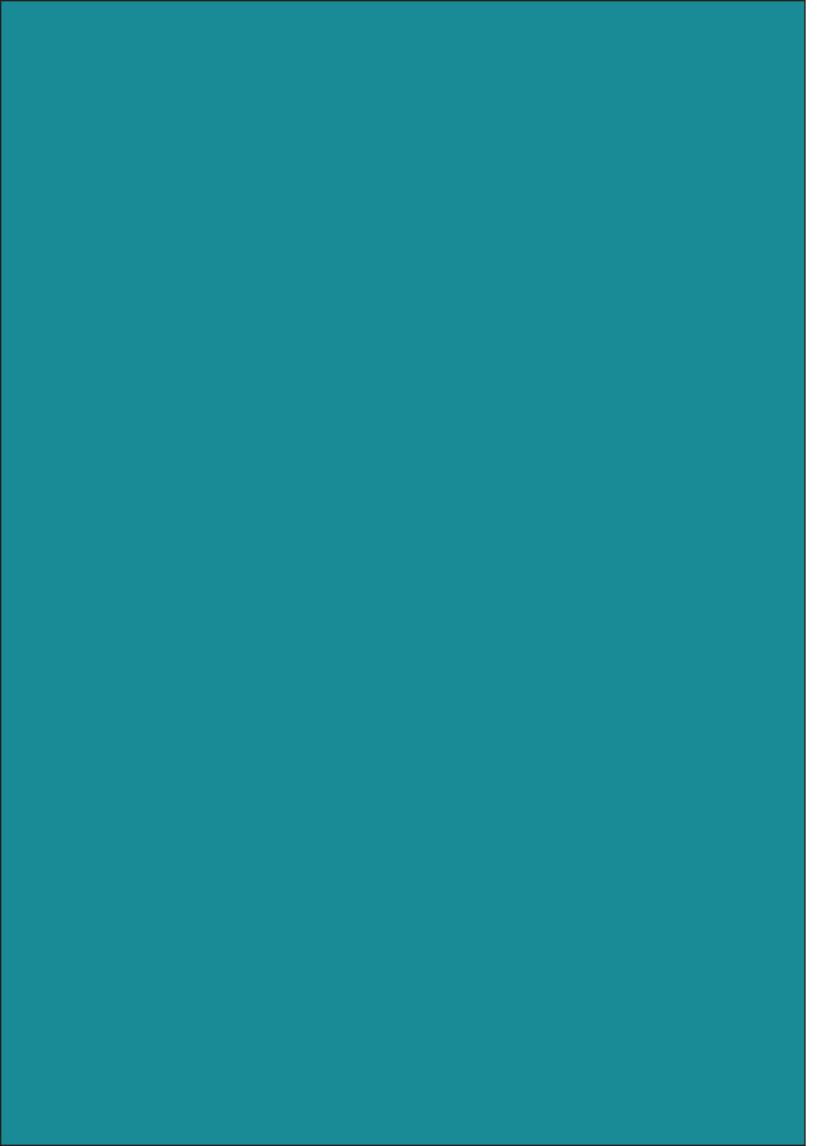


A DIVISION OF PHARMANUTRA









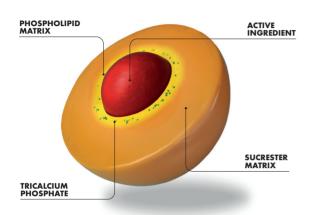
### PROPRIETARY PRODUCTS

Alesco products and functional ingredients offer unique, scientifically proven characteristics, suited for a wide range of needs in the pharmaceutical, nutraceutical, food and cosmetics sectors.

We develop and distribute only nationally exclusive products with unique, innovative properties.

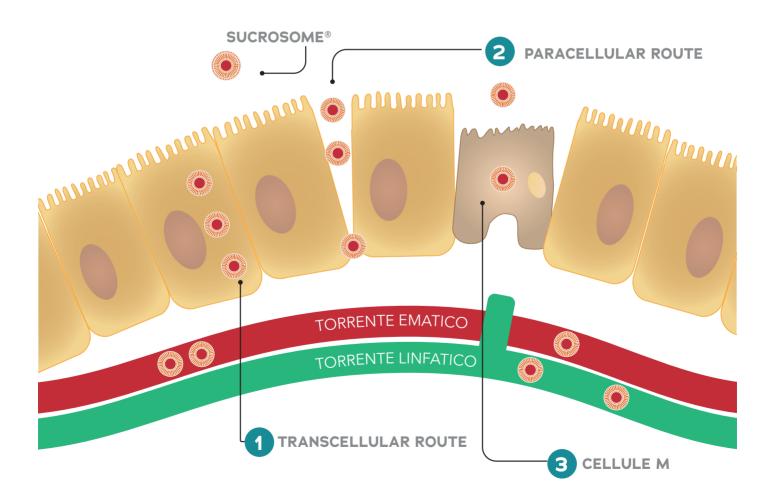
In particular, with Sucrosomial® Technology, a patented delivery system, Alesco supplies mineral complexes, phytoextracts and vitamins with high tolerability, efficacy and absorption.

### SUCROSOMIAL® TECHNOLOGY



The active ingredients are encapsulated in an innovative membrane consisting of a phospholipid matrix and sucrose esters of fatty acids that allow them to pass through the acidic gastric environment without interacting with the mucosa and other nutrients and then be absorbed directly in the blood stream.

- O Excellent absorption and bioavailability
- High concentration
- O Neutral taste
- Does not interfere with the absorption of other nutrients





### SUCROSOMIAL® TECHNOLOGY

## **APPLIED TO MACROELEMENTS**

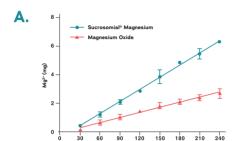


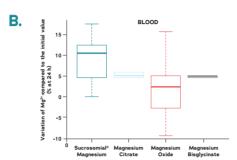
### SideMag®

Sucrosomial® Magnesium Oxide, excellence proven by a comparative study.

# COMPARATIVE STUDY ON THE BIOAVAILABILITY OF SUCROSOMIAL® MAGNESIUM (SIDEMAG™) VS MAGNESIUM OXIDE, MAGNESIUM BISGLYCINATE AND MAGNESIUM CITRATE

In-vivo test on isolated rat intestine.





- A. Sucrosomial® **Technology increases the quantity of magnesium passing through the intestinal tissue** 2.2 times more than magnesium oxide
- **B.** After administering Sucrosomial® Magnesium, a significant increase in the concentration of magnesium in the blood was recorded compared to other formulas



### SideMag Marine®

Sucrosomial® Magnesium Hydroxide extracted from the pure sea waters of Northern Europe, offering high bioavailability and excellent organoleptic properties.

### HEALTH CLAIMS APPROVED BY THE EFSA RELATING TO MAGNESIUM HYDROXIDE INTAKE

"Magnesium contributes to a reduction of tiredness and fatigue"

"Magnesium contributes to normal muscle function"

"Magnesium contributes to normal psychological function"



#### UltraCal Sea®

Sucrosomial® Calcium containing *Lithothamnion Calcareum* that guarantees full bioavailability and excellent tolerability.



### **UltraCal**

Sucrosomial® Calcium with tricalcium phosphate that ensures full bioavailability thanks to the association with Sucrosomial® Technology.

## HEALTH CLAIMS APPROVED BY THE EFSA RELATING TO CALCIUM INTAKE

"Calcium is needed for the maintenance of normal bones"

"Calcium contributes to normal muscle function"

"Calcium is needed for the maintenance of normal teeth"

## IN ACCORDANCE WITH THE WORLD HEALTH ORGANISATION (WHO)

"[...] the administration of calcium during pregnancy helps to prevent pre-eclampsia."

"[...] the administration of calcium improves intake and consequently reduces the risk of hypertension during pregnancy."





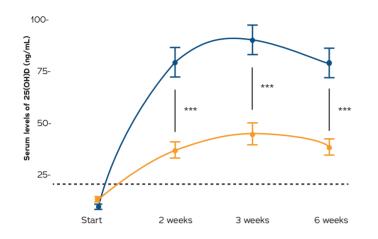
### **SUCROSOMIAL® TECHNOLOGY**

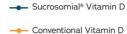
## **APPLIED TO MICROELEMENTS**

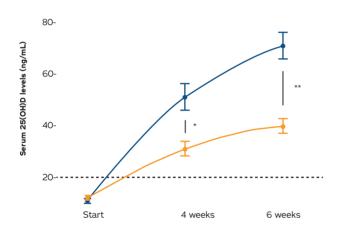


### UltraD3®

Ultra D3® is a new formulation based on Sucrosomial® Vitamin D3, designed to ensure better absorption and proper intake for the well-being of the human body.







### HEALTH CLAIMS APPROVED BY EFSA RELATED TO THE INTAKE OF VITAMIN D3

"Vitamin D contributes to the normal absorption/ utilization of calcium and phosphorus"

"Vitamin D contributes to the maintenance of normal bones and teeth"

"Vitamin D contributes to the maintenance of normal muscle function"

"Vitamin D contributes to the normal function of the immune system"



### **UltraSel®**

Sucrosomial® Selenium containing sodium selenite that ensures excellent absorption and bioavailability.

### HEALTH CLAIMS APPROVED BY THE EFSA RELATING TO SELENIUM INTAKE

"Selenium contributes to the normal function of the immune system"

"Selenium contributes to the protection of cells from oxidative stress"

"Selenium contributes to the normal thyroid function"





### UltraB12

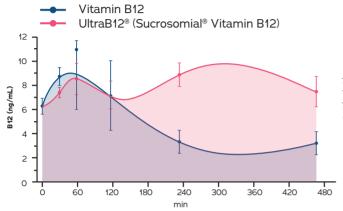


Ultra B12® is a new formulation based on Sucrosomial® Vitamin B12, designed to ensure maximum absorption, high bioavailability, and better tolerance.

### **PRE-CLINICAL RESEARCH**

PharmaNutra S.p.A. constantly invests in scientific research to obtain active ingredients that boast superior bioavailability compared to conventional ones.

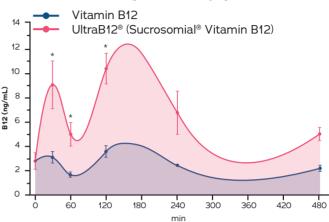
## Kinetic profile of Vitamin B12 in wild-type mice\*



The bioavailability of UltraB12® is 2.5 times greater than that of conventional Vitamin B12.

\*Internal data

## Kinetic profile of Vitamin B12 in mice with gastric atrophy\*

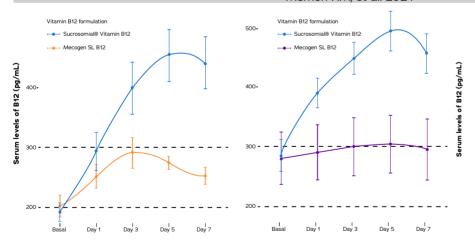


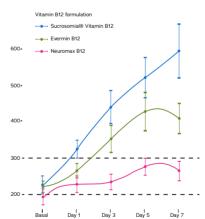
The peak plasma concentration of UltraB12® is reached after 4 hours, 3 times higher than that of conventional Vitamin B12.

#### **CLINICAL RESEARCH**

Comparative bioavailability study of supplemental oral Sucrosomial® vs. oral conventional vitamin B12 in enhancing circulatory B12 levels in healthy deficient adults: a multicentre,

double-blind randomized clinical trial Memon NM, et al. 2024





### Sucrosomial® Vitamin B12 shows superior results compared to conventional treatment

### **HEALTH CLAIMS APPROVED BY THE EFSA RELATING TO VITAMINE B12**

"Vitamin B12 contributes to normal energy metabolism"

"Vitamin B12 contributes to the normal functioning of the nervous system" "Vitamin B12 contributes to the normal metabolism of homocysteine"

"Vitamin B12 contributes to the normal function of red blood cells"





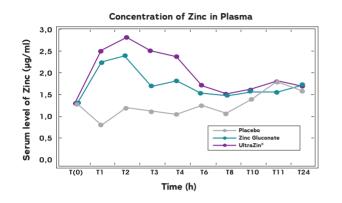


### **UltraZin®**

It is Sucrosomial® Zinc containing Zinc Oxide that ensures correct zinc intake without side effects.

### COMPARATIVE STUDY OF ULTRAZIN™ VS ZINC GLUCONATE

In-vivo study on rats with diets with low zinc content receiving UltraZin®, Zinc Gluconate and a placebo.



UltraZin® shows a significant increase in concentrations of zinc in the blood compared to zinc gluconate.

### HEALTH CLAIMS APPROVED BY THE EFSA RELATING TO ZINC INTAKE

"Zinc contributes to the normal function of the immune system"

"Zinc contributes to the protection of cells from oxidative stress"

"Zinc contributes to normal cognitive function"

"Zinc contributes to the maintenance of normal hair"

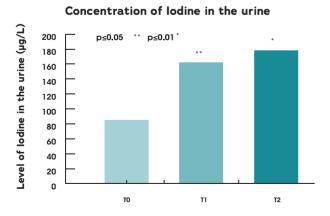


#### **Ultralod®**

It is Sucrosomial® lodine containing Sodium lodate, able to ensure excellent bioavailability and a correct lodine intake.

### **EVALUATION OF RENAL EXCRETION OF IODINE**

Study conducted on 20 healthy volunteers with a normal diet.



The increase in urinary iodide is closely correlated to the quantity of iodine in the body, and offers a useful parameter for underlining the absorption and bioavailability of Ultralod<sup>®</sup>.

#### HEALTH CLAIMS APPROVED BY THE EFSA RELATING TO IODINE INTAKE

"lodine contributes to the normal production of thyroid hormones and normal thyroid function"

"lodine contributes to normal cognitive function"

"lodine contributes to normal functioning of the nervous system"

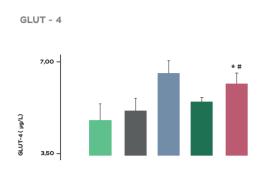


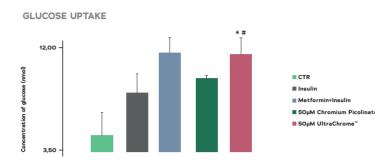


### **UltraChrome®**

Sucrosomial® Chromium, ensuring excellent bioavailability and correct chromium intake.

### MODULATION OF INSULIN-DEPENDENT GLUCIDIC METABOLISM





GLUT - 4

At low doses, significantly stimulates the synthesis of the glucose carrier GLUT-4 on the surface of muscle cells (19.7%) compared to Chromium Picolinate (6.8%)

GLUCOSE UPTAKE At low doses, significantly increases the entry of glucose in muscle cells (23.6%) compared to Chromium Picolinate (8.7%)

### OTHER SPECIALITIES



### UltraMir® HYDROGLYCERIC AND MYRRH OIL EXTRACTS

The sesquiterpenes present in myrrh have a powerful local anaesthetic and analgesic effect, with antiseptic and antibacterial properties. **UltraMir® Oil** has local analgesic properties. **UltraMir® Hydro** is antiseptic against fungi and bacteria.



# **UltraSterol®** AN INNOVATIVE FORM OF PHYTOSTEROLS FOR PROTECTING THE HEART

It exploits microencapsulation technology, encasing the free phytosterols that help to maintain normal exogenous cholesterol levels.



### **UltraJoint®**

Vegetable glucosamine for healthy joints. Glucosamine is involved in the production of cartilage in the joints, and at the same time reduces inflammation.



#### UltraRed® RED RICE YEAST

Obtained by natural fermentation with Monascus Purpureus yeast. The Monacolin K contributes to the maintenance of normal blood cholesterol levels. Alesco guarantees and certifies the origin from natural fermentation.



### **ALESCO**

Since 2000 Alesco has been committed to introducing innovative raw materials to the Italian nutraceutical, pharmaceutical and food market, supported by scientific evidence and produced using the best technologies.

### **OUR SERVICES**

In addition to supplying functional ingredients and raw materials to the pharmaceutical, nutraceutical and food industry, Alesco makes available a number of services to its Italian and foreign partners:

- O Know-how and scientific research
- O Scientific back-up for ingredients
- O Support in the formulation and supply of finished products
- O Technical and commercial training for the sales force
- O Image and communication consulting for raw materials
- O Contact with medical and scientific opinion leaders











