



CODIF

Technologie naturelle

EARLY BOOST

Energising - Anti Ageing

The first ingredient based on vegetal Taurine



For the first time in cosmetic, Codif Laboratories have developed an ingredient based on Taurine of vegetable origin with unique energising action. Hydrating flash, anti-fatigue, restructuring and anti-wrinkle, Early Boost meets the needs of over-active skins.

Developed from our patented HTAC technology (Hydro-Thermolysis ACcelerated by Supercritical CO₂)

Stimulates ATP synthesis by + 50%^{***}

Bodybuilder action on fibroblasts

Reduces the first signs of fatigue in only 24 hours and reduces the first signs of ageing after 28 days treatment

A UNIQUE ENERGISING ACTION THANKS TO VEGETAL TAURINE

Taurine is an amino acid very well known for its energising properties. Even if the taurine currently used for food or cosmetic applications is mainly synthetic, it is found in a wide variety of foods of animal origin such as eggs, cow's milk and breast milk. In the vegetal kingdom only a few red algae synthesise taurine, including *Jania Rubens*.

Due to Codif Laboratories' expertise in the cultivation of *Jania Rubens* in photo-bioreactors, Early Boost is the first cosmetic active ingredient based on Taurine of vegetable origin.
It stimulates ATP synthesis by +50%***.

AN ENERGISING ACTION MORE POWERFUL THAN SYNTHETIC TAURINE

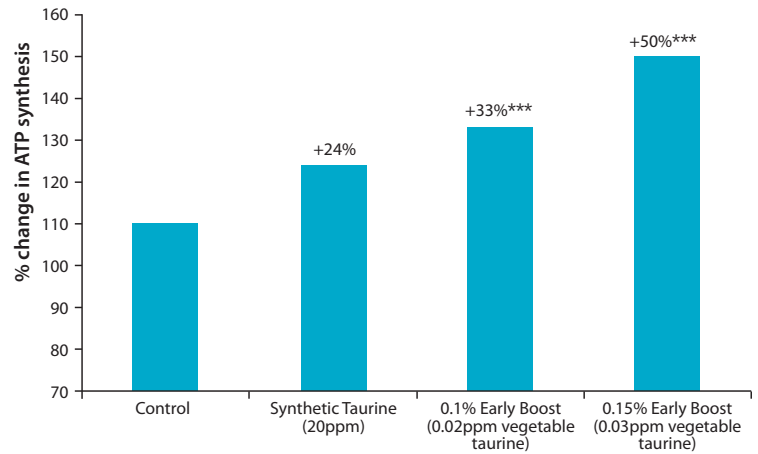
Vegetable Taurine contained in Early Boost used at concentrations 1000 times lower than synthetic Taurine stimulates ATP synthesis by 50%*** compared to only 24% for synthetic Taurine.



Different sources of Taurine

Cow's Milk	2,4 ppm
Breast Milk	42 ppm
Cultivated <i>Jania Rubens</i>	400 ppm

Energising action: increase in ATP synthesis



< Culture of *Jania rubens* in a photo-bioreactor

WHAT MAKES IT UNIQUE

TECHNOLOGICAL PERFORMANCE: PATENTED HTAC TECHNOLOGY

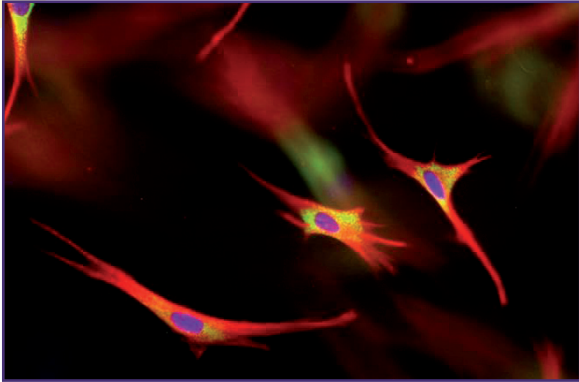
Early Boost combines vegetable taurine extracted from *Jania Rubens* with an oligofurcellaran obtained by a unique and patented technology: HTAC. Hydro Thermolysis ACcelerated by supercritical CO₂ depolymerises natural molecules without using solvent or enzyme. It is a high technological process which uses the properties of supercritical CO₂ and generates no waste.

ENERGETIC PERFORMANCE: BODYBUILDING ACTION ON FIBROBLASTS

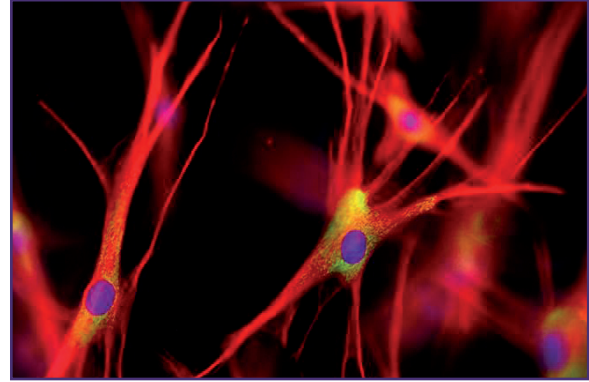
The energising action of vegetable taurine is combined with the protective and restructuring effect of oligofurcellaran. This “supercomplex” then becomes a fibroblast bodybuilder. The number and length of fibroblast extensions are doubled in cultures treated with Early Boost. These extensions are involved in the tensile forces applied by fibroblasts to the extracellular matrix and therefore to its degree of tension.

Early Boost multiplies the number and length of fibroblast extensions by factor 2.

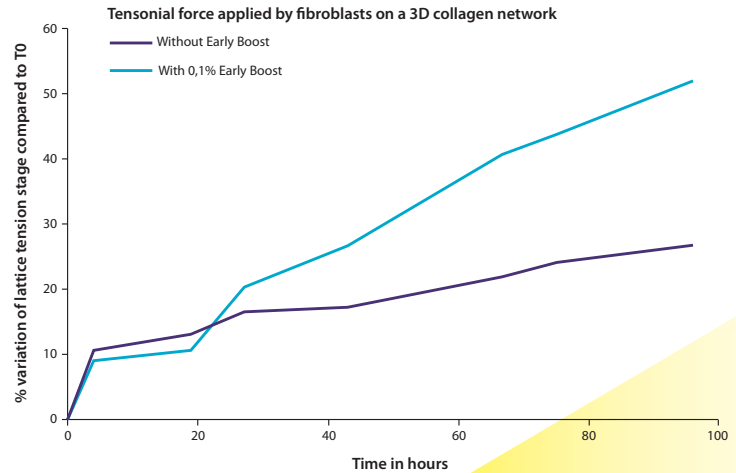
Before



After



Early Boost increases the tensile forces applied by fibroblasts to the extracellular matrix.



PRODUCT BENEFITS

IMMEDIATE HYDRATION

ANTI-FATIGUE

RESTRUCTURING

ANTI-WRINKLE

IN-VITRO

+24%^{***} mitochondrial activity

+50%^{***} ATP synthesis

34%^{**} protection against oxidising stress

138%^{***} protection against pollution-induced dehydration

2x more fibroblast extensions, 2x longer

+51% tensile force applied to the extra-cellular matrix

IN-VIVO

2 hours after a single application:

+32%^{***} hydration on average and up to +44%

24 hours after a single application, reduction in signs of fatigue:

Bags: -8%* on average and up to -13%

Shadows: -8%^{**} reduction on average and up to 16% less

Drawn lines: -11%^{**} reduction on average and up to 13% less

Crumpled skin: -7%^{**} reduction on average and up to 11% less

After 2 weeks treatment:

Restructuring effect: +4% on average and up to +16%

After 4 weeks treatment:

Reduction in wrinkles: -6%^{**} on average and up to -15%

Reduction in signs of fatigue 24 hrs after a single application of a formulation containing 1.5% Early Boost.



Before application



24H after application

Reduction in the first eye contour wrinkles after 4 weeks of twice daily application (formulation containing 1.5% Early Boost).



Before application



After 4 weeks

INDICATIVE FORMULATION

Early Energizing Gel

Phase	Raw material / Trade name	INCI name	%
A	PURIFIED WATER	Aqua	89.087
	SOLUTION ROUGE CI:1720 1 POURCENT (1)	Aqua & CI 17200	0.283
	ELESTAB CPN (2)	Chlorphenesin	0.27
	EDETA BD (2)	Disodium Edta	0.10
	PHENOXYETHANOL (3)	Phenoxyethanol	0.66
B	CARBOPOL ULTREZ 10 (4)	Carbomer	0.25
C	SOUDE (SOLUTION 5 N) (5)	Aqua & Sodium Hydroxide	0.25
D	ZEMEA (6)	Propanediol	3.00
	POLYGLYCOL 6000 S (7)	Peg-150	1.00
	PARFUM	Parfum	0.20
E	SP PROCETYL AWS MBAL LQ - RB (8)	Ppg-5-Ceteth-20	0.70
	COVABSORB EW (9)	Ppg-26-Buteth-26 & Peg-40 Hydrogenated Castor Oil & Ethylhexyl Methoxycinnamate & Aqua & Butyl Methoxydibenzoylmethane & Ethylhexyl Salicylate	0.20
F	EARLYBOOST PE (10)	Glycerin & Aqua & Phenoxyethanol & Sodium Carrageenan & Jania Rubens Extract & Ethylhexylglycerin	1.50
G	COVACRYL MV60 (9)	Sodium Polyacrylate	0.50
	GLYCERINE BIDISTILLEE CODEX (7)	Glycerin	2.00

(1) UNIVAR (LAMBERT RIVIERE), (2) AMI, (3) BIOPHILL, (4) GATTEFOSSE FRANCE SA, (5) BRENNTAG, (6) IMCD-SPCI, (7) QUIMASSO FRANCE EURL, (8) CRODA FRANCE, (9) LCW, (10) CODIF Recherche et Nature

PROCEDURE

• Warm phase A up to 75°C under gentle agitation. • Let's hydrate B on the surface of A without agitation for 10 minutes, then put under emulsifier 1500 rpm for 20 minutes. • Add D under emulsifier 2000 rpm for 10 minutes. • Cool down to 40°C under gentle agitation. • Add materials from E step by step under gentle agitation for 5 minutes. • Add the pre-mix F then G under gentle agitation for minutes. • Add the pre-mix H under emulsifier 1500 rpm for 20 minutes. • Let's agitate for 10 minutes

HOW TO USE IT

Water soluble active to be used at 1.5% in:

A youth-protecting and skin-perfecting formula with **CORNEOSTICKER DS**

An energising moisturising concentrate with **PHEOHYDRANE**

A facial essence for busy city dwellers combined with **AREAUMAT PERPETUA**

INCI

EARLY BOOST PE

Glycerin (and) Water (and) Jania rubens extract (and) sodium carrageenan (and) phenoxyethnaol (and) ethylhexylglycerin

EARLY BOOST PA

Glycerin (and) Water (and) Jania rubens extract (and) sodium carrageenan (and) phenethyl alcohol



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