



SLENDYL®

Reshapes the silhouette
&
Prevents the loss of firmness
for a perfect body

*

Two levels of success

Banishes fat deposits

Blocks adipocyte differentiation

Decreases lipogenesis

Stimulates lipolysis

Firms up the skin naturally

Increases collagen synthesis



Today it exists an active concern in the Cosmetic market to develop products able to improve the appearance of skin affected by unwanted deposition and/or accumulation of fat in the adipose tissue.

Three ways of action are possible (1) the inhibition of lipogenesis by decreasing the synthesis of new triglycerides in adipocytes (2) the stimulation of lipolysis by activating the degradation of triglycerides stored in adipocytes and (3) the decrease of adipogenesis by blocking the differentiation of pre-adipocytes into mature adipocytes. Traditionally slimming actives acts only on the two first stages. It exists a few actives influencing adipocyte differentiation.

GELYMA proposes a new marine solution: SLENDYL® that acts through a global strategy based on the three main pathways of fat accumulation: adipogenesis, lipogenesis and lipolysis, with in addition reinforcement of skin firmness.

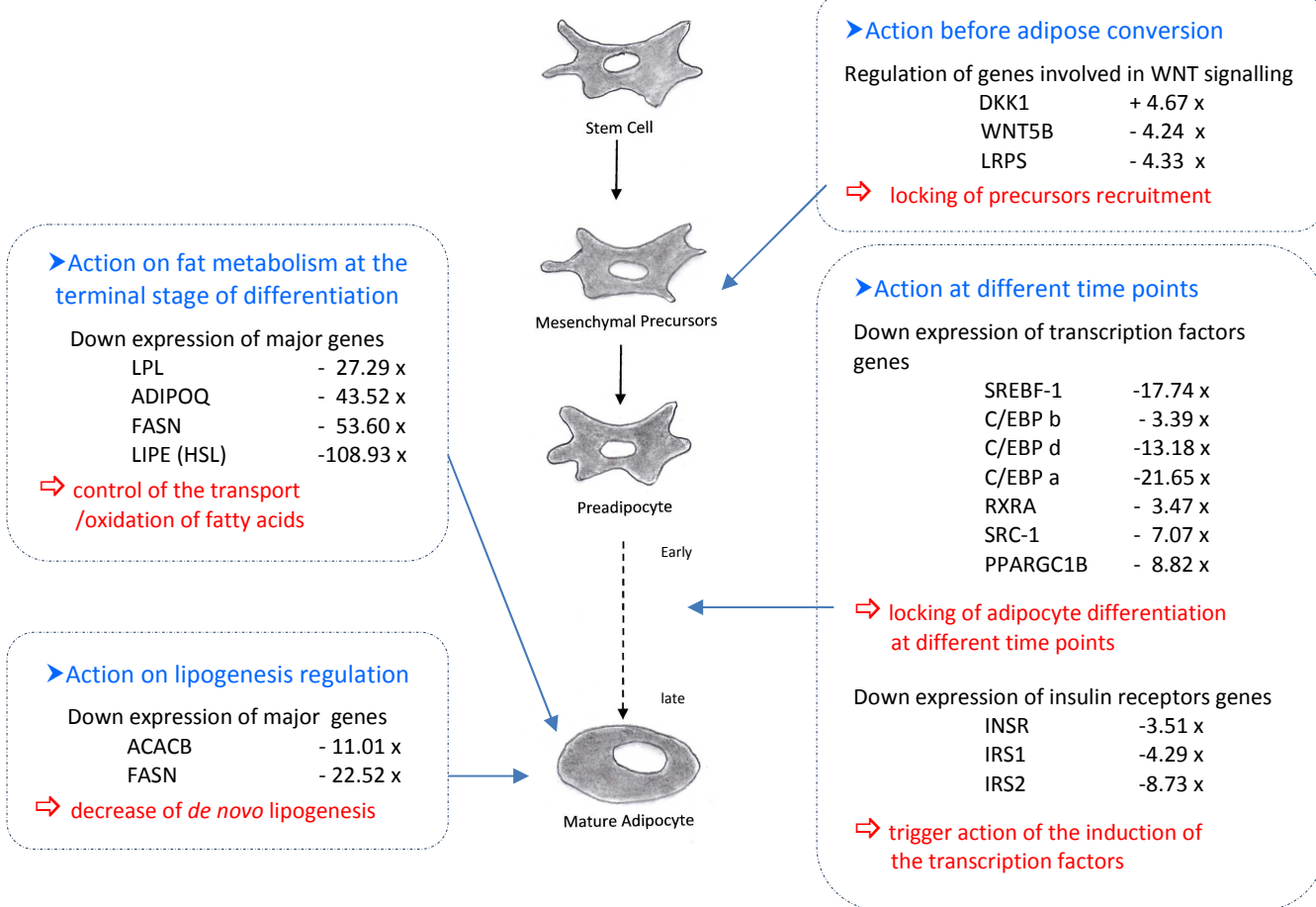
SLENDYL® combines two brown algae extracts prepared from *Himantalia elongata* and *Undaria pinnatifida* using a specific mineral spring water known for its richness in certain minerals (e.g. calcium and magnesium) and to its therapeutic benefits for the prevention of obesity.

Mechanisms of action

The mechanisms of action of SLENDYL® have been studied by using different methods.

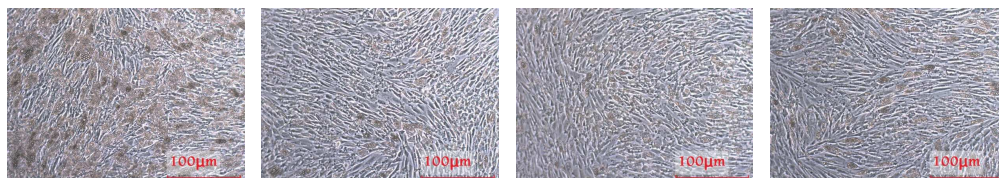
- Genomic analysis on NHDFs fibroblasts submitted to 3% active for 24h. Analysis by qRT-PCR on TaqMan cards (Strati CELL-BELGIUM).
- Elisa testing of normal human fibroblasts submitted to different doses of active (SEPhRAPARMA-FRANCE).
- In tubo analysis on PDE activity (Laboratoire BIO-HC- FRANCE)
- In vivo study - consumer test on 20 female volunteers (19-50 years old) with a body mass index between 20-27 Kg/m². Application of a gel (4% active) twice daily during 28 days vs placebo. Analysis of the shape/morphology of the thighs on digital photographs at day 0 and day 28 (SPINCONTROL-FRANCE).

SLENDYL® blocks adipocyte differentiation at different stages by reducing the capacity to store fats in pre-adipocytes



➤ Inhibition of lipid accumulation during the maturation of pre-adipocytes into adipocytes during 14 days

The evaluation of intracellular lipids content confirms the capacity of SLENDYL® to reduce the lipid accumulation during the maturation of pre-adipocytes



Control

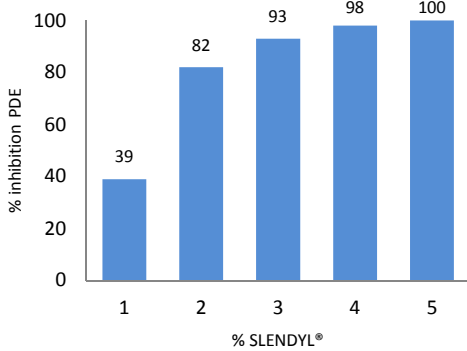
SLENDYL® 3%

SLENDYL® 1%

SLENDYL® 0.33%

SLENDYL® stimulates the lipolysis by promoting the breakdown of fats in adipocytes

► Inhibition of phosphodiesterase PDE activity



The phosphodiesterase PDE degrades c-AMP into 5'-AMP which lowers the intracellular concentration of c-AMP and thus increases the lipolytic activity.

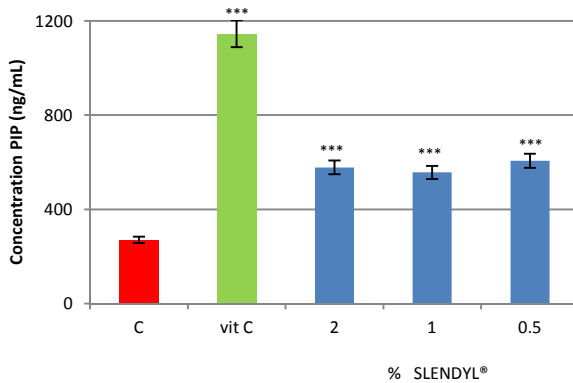
SLENDYL® significantly inhibits PDE activity by

- 39 % with 1 %
- 82 % with 2 %
- 93 % with 3 %

► By inhibiting PDE, SLENDYL® promotes the breakdown of fats in adipocytes and thus stimulates lipolysis.

SLENDYL® reinforces the properties of the dermis by improving firmness and giving improved tone

► Stimulation of Type I collagen synthesis in fibroblasts



SLENDYL® significantly stimulates the synthesis of Type I pro-collagen (PIP) respectively by

- + 114 % with 2 %
- + 106 % with 1 %
- + 125 % with 0.5 %

in human dermal fibroblasts.

SLENDYL® also increases the protein synthesis from +19% to 28% according to concentrations.

► Results relative to the stimulation of pro-collagen expressed in respect of total protein synthesis confirm the very highly significant inductive action (***) of SLENDYL® on the synthesis of Type I collagen.

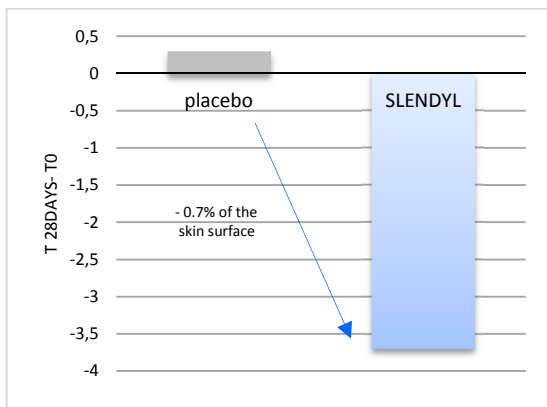
► SLENDYL® firms up the skin naturally.

SLENDYL® reduces the shape/morphology of the thighs for refining the silhouette

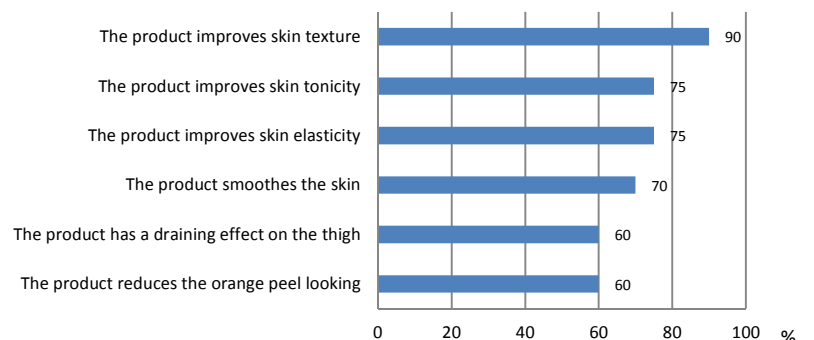
Clinical study : 20 volunteers treated twice daily with a gel containing 4% SLENDYL® during 28 days vs placebo.

► Analysis of digital photographs of the front (from waist to knees)

► Subjective evaluation



80% overall satisfaction by volunteers



SLENDYL® significantly reduces the shape/morphology of thighs by -3.7cm² vs placebo. This effect was observed in 65% of the volunteers.

SLENDYL® helps reshape the body and improves body tone.

