





Introduction

PROVITAL GROUP
For a beautiful life from cells to the skin

» For a beautiful life from cells to the skin

Thank you !





Introduction

PROVITAL GROUP
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» For a beautiful life from cells to the skin

- › Since 1979 we decode the treasures that nature provides
- › Provital Group is a bridge between beauty and well-being.
- › We work from the inside of the cells to the outside , for a more beautiful skin and a more beautiful life.





Introduction

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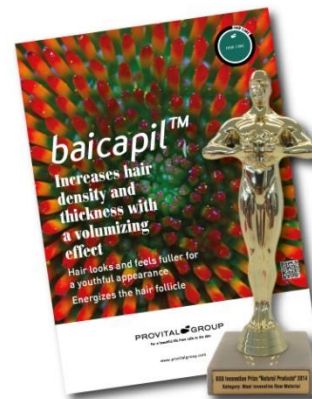
» Innovation

- › Constant development of new products
- › Ideas: new products, global and local trends, innovative formulations, claims, worldwide launchings.



BSB Innovation 1st Prize for **Melavoid™**

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BSB Innovation 1st Prize for **Baicapil™**



Sepawa Innovation 2nd Award
for **Melavoid™**



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» The promise

› The promise:

You will achieve breathtaking results

› The concept:

Modulating adipocyte behaviour





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» The problem



Altersdeszendenz des Gesichtes; aus: J. F. Hönig. Ästhetische Chirurgie, Stinkopff – Springer Verlag, Heidelberg 2000



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» The problem

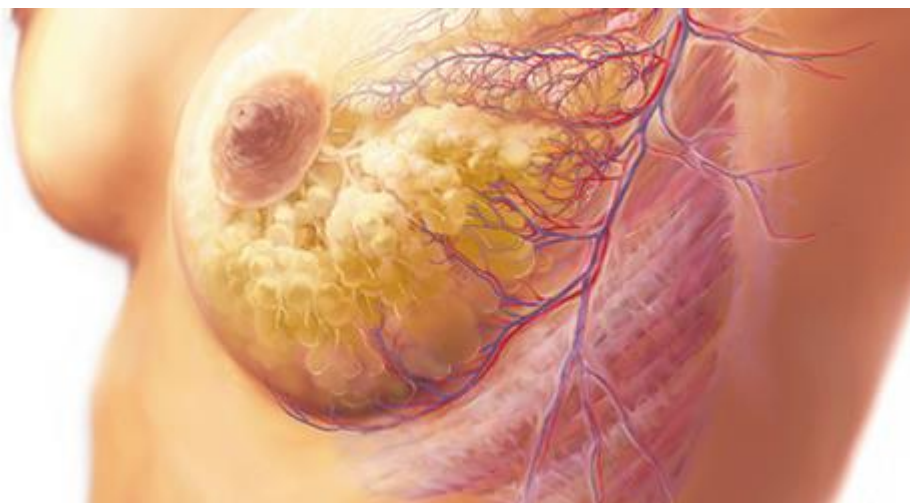




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» The problem

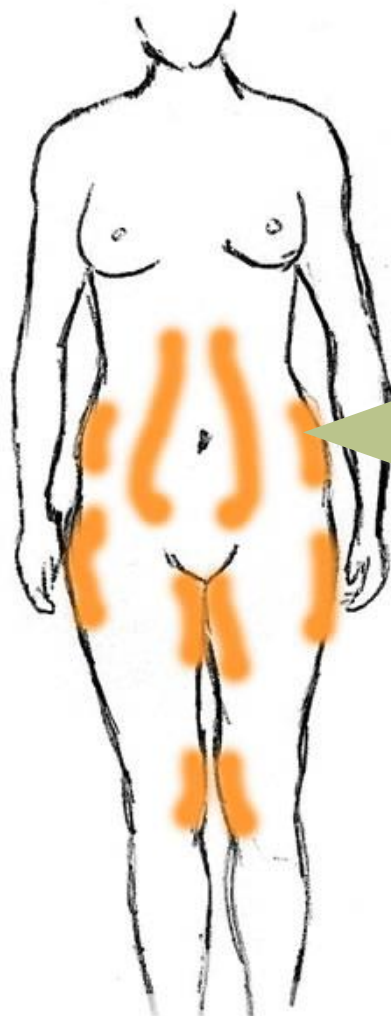




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» The problem





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» The problem



**Adipose tissue plays a key role in
the process of aging...**



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» Fatty Tissue

› The fatty tissue is responsible for:

1. Absorption and accumulation of fat = **body energy reservoir**
2. Regulation of body metabolism and homeostasis
3. Body surface **modeling**



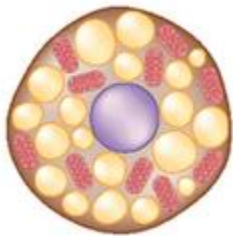
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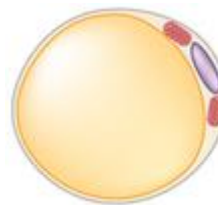
» Types of adipocytes

- › Adipose tissue is predominantly formed by **adipocytes**.
- › Recent studies have demonstrated that there are 3 types of adipocytes:

Brown



White



Beige



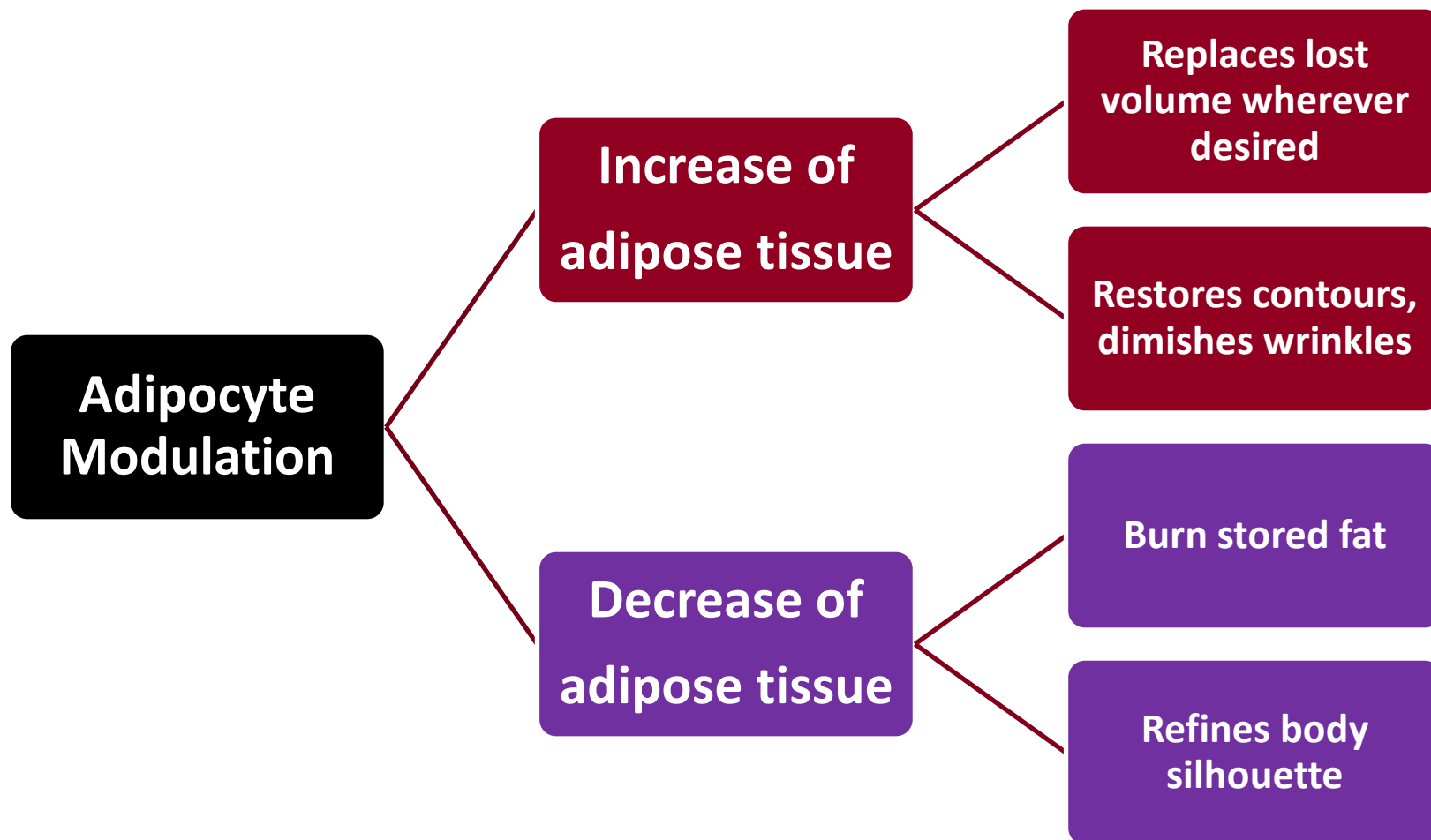
- | | | |
|---------------------------------|-----------------------|---|
| › Fat burners for thermogenesis | › For fat storage | › When inactive similar to white |
| › Small fat droplet | › One big drop of fat | › When active similar to brown |
| › Many mitochondria | › Few mitochondria | |



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» Modulation of adipocytes





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» Modulation of adipocytes





-
- Stem cell → Preadipocyte → Preadipocyte in development → Immature adipocyte → Mature adipocyte



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» **Linefill™** //////////////////////////////////////

- › Fraction rich in **sesamin**, which is obtained from **sesame** seeds (*Sesamum indicum*):
 - Originated in Ethiopia.
 - Important role in Indian Ayurvedic medicine.





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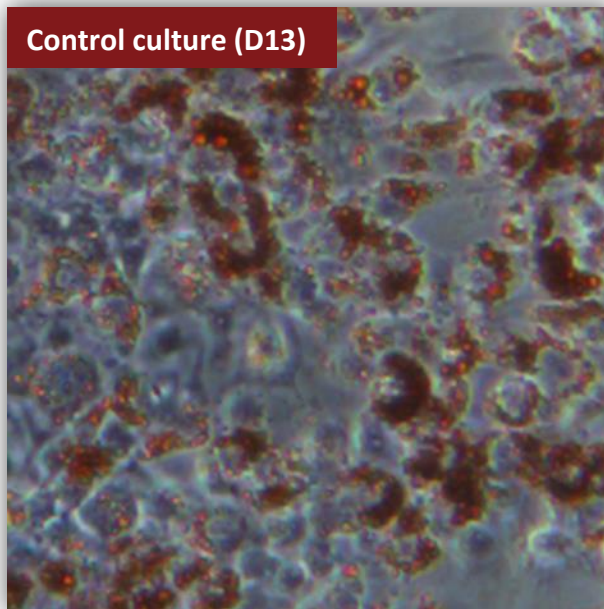
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» *In vitro* efficacy: Oil-Red O staining

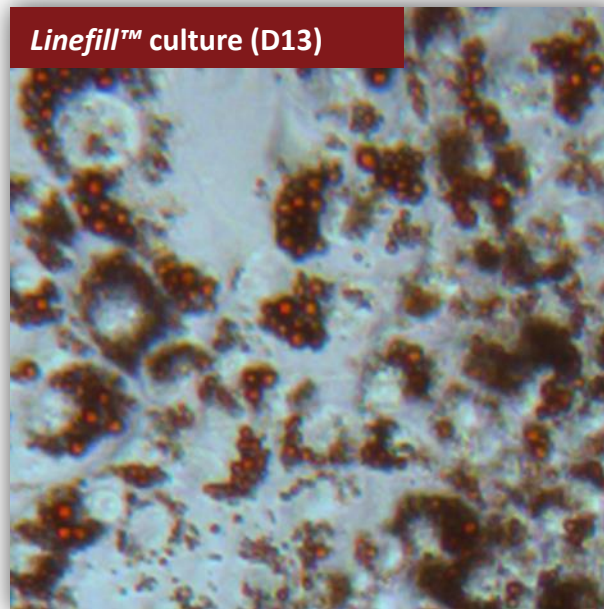
› Variation in the accumulation of triglycerides

Increase in the number and size of lipid vesicles → preadipocytes successfully differentiated into fully functional, mature adipocytes.

Control culture (D13)



Linefill™ culture (D13)





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» *In vivo* efficacy

› To confirm the effect of **Linefill™** wrinkle filler and lip pumper:

- 41 volunteers (women) with wrinkles in perioral area: nasolabial folds, supralabial and lateral wrinkles.
- 2 groups: 20 women applied a formulation with 2% **Linefill™**, while the control group of 21 women applied the same formulation without **Linefill™** (placebo).
- Age: 45 - 65 years of age.
- Application area: perioral area, including the nasolabial folds and lips.
- Twice a day for 28 days.
- Measurements were made on Day 0 (D0), before the application, and again on Day 28 (D28).



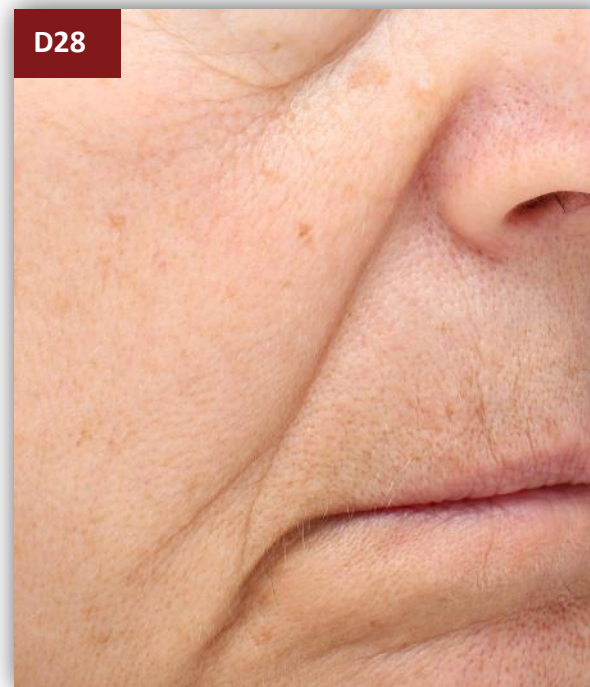
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» ***In vivo* efficacy: wrinkle and roughness reduction in the perioral area** //

› Nasolabial fold

.....





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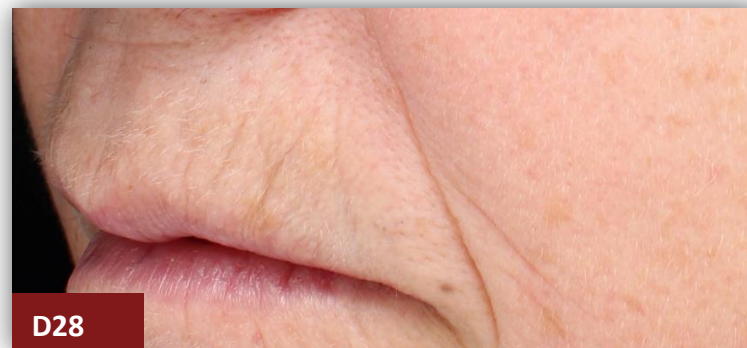
» **In vivo efficacy: wrinkle and roughness reduction in the perioral area** //

› Supralabial wrinkles (bar code)

.....



D0



D28



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» ***In vivo efficacy: wrinkle and roughness reduction in the perioral area*** //

› Marionette lines (lateral wrinkles)

.....



Linefill™ visibly decreases all types of wrinkles



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» *In vivo* efficacy: lip volume increase



› Lips



Linefill™ increased lip volume, thus achieving more voluminous and sensual lips



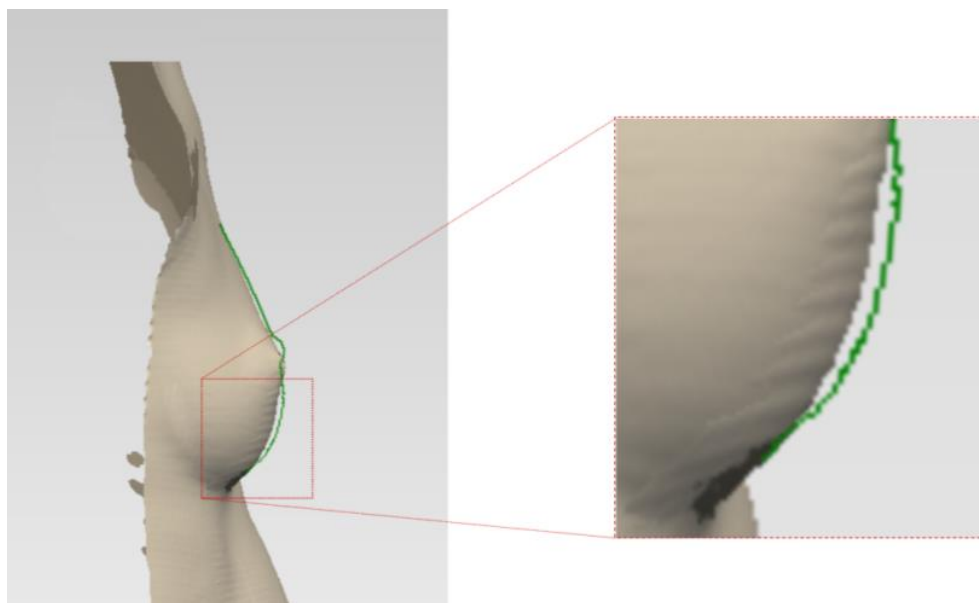
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» *In vivo* efficacy: lip volume increase



› Breasts



***Linefill™* increases bust volume, thus achieving a more female body contour**



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» Conclusions

- › Refills wrinkles and cutaneous folds
- › Refill wrinkles and cutaneous folds
- › Potent volumizing effect on the lips
- › Blurs imperfections and improves the appearance of skin (as shown in further studies)





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» Cosmetic applications

- ✓ • Anti-aging lines
- ✓ • Lip and eye contour creams
- ✓ • Lip fillers
- ✓ • Targeted body volumizers (breasts, buttocks, cheeks etc.)
- ✓ • Anti-aging hand treatments
- ✓ • Complement for firming treatments (face, neck, décolleté, breasts)



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» Technical information

- › INCI name: Caprylic / Capric Triglyceride, Dimethyl isosorbide, Sesamum Indicum Seed Extract, Tocopherol.
- › Transparent liquid.
- › Colorless – pale yellow color.
- › Soluble in oil.
- › Insoluble in aqueous solutions.
- › Recommended dose: 1 – 3%.
- › China approved.





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» Volumising Wrinkle Filler

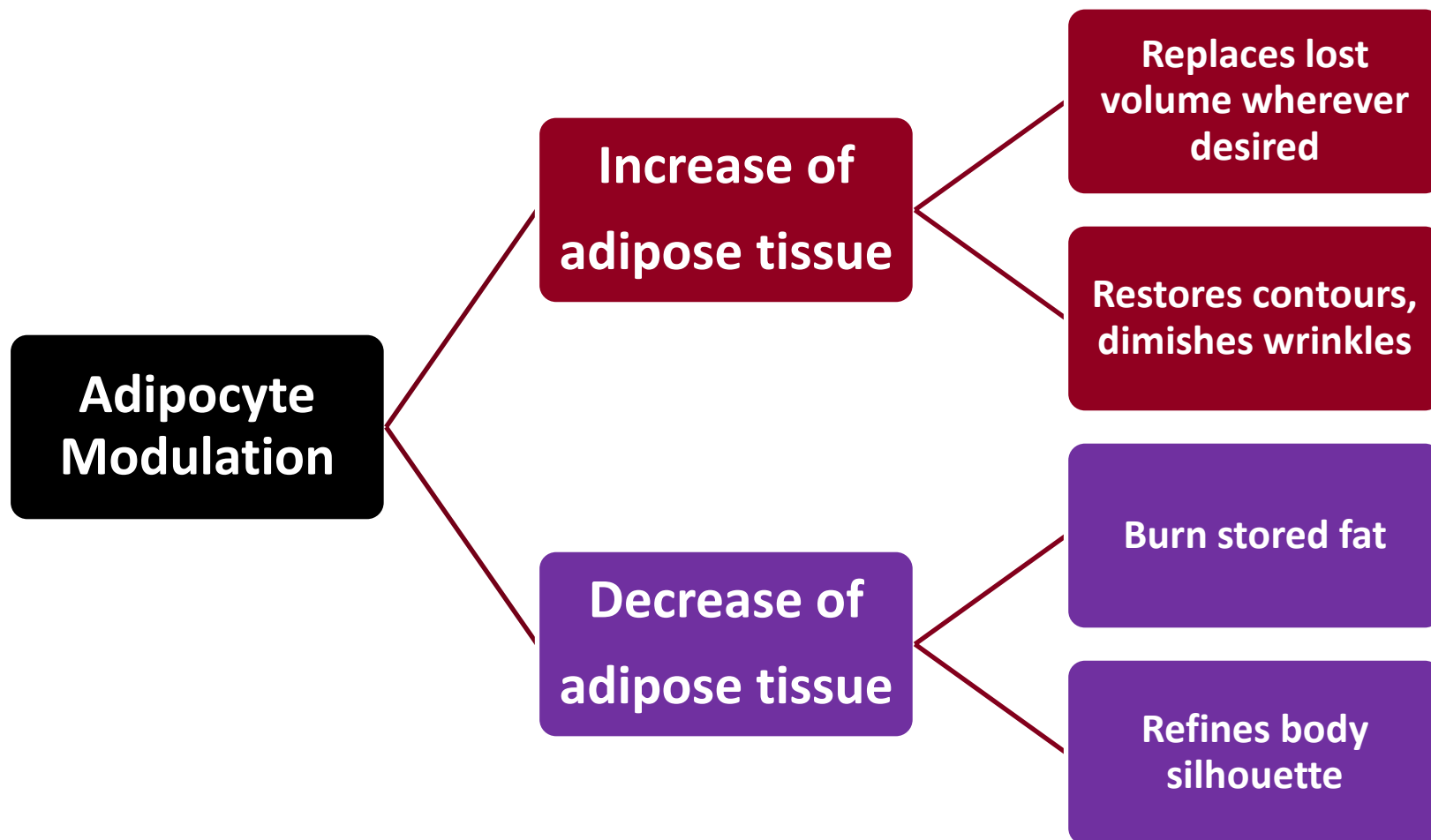
PHASE	INCI / PCPC	TRADE NAME	SUPPLIER	% (w/w)
11	Aqua (Water)	Deion. Ster. Water		71.17
12	Polyacrylate Crosspolymer-11	Aristoflex Velvet	Clariant	0.80
13	Aqua (Water), Tetrasodium Glutamate Diacetate, Sodium Hydroxide	Dissolvine GL-47-S	Akzo Nobel	0.20
14	Pentylene Glycol	MinaCare Pentiol Green	Minasolve	2.00
15	Glycerin, Aqua (Water), Mangifera Indica (Mango) Fruit Extract, Potassium Sorbate, Sodium Benzoate	Mango - ECO	Provital	2.50
21	Triisostearin	Pelemol GTIS	Phoenix Chemical	2.00
22	Caprylic/Capric Triglyceride	Myritol 318	Basf	5.00
23	Caprylic/Capric Triglyceride, Dimethyl Isosorbide, Sesamum Indicum (Sesame) Seed Extract, Tocopherol	linefill™	Provital	2.00
24	Glyceryl Stearate Citrate	Axol C62 Pellets	Evonik	2.50
25	Palmitoyl Proline, Magnesium Palmitoyl Glutamate, Sodium Palmitoyl Sarcosinate	Sepifeel One	Seppic	2.00
26	Glyceryl Caprylate, Glyceryl Undecylenate	Lexgard Natural	Inolex	0.50
31	Sodium Polyacrylate, HEC, Ethylhexyl Stearate, Trideceth 6	Natursol A100	Rheolab	2.00
41	Aqua (Water), Sodium Hydroxide	Sodium Hydroxide (10%)		2.20
51	HDI/Trimethylol Hexyllactone Crosspolymer, Silica	Sunpu-170	Sunjin Chemical	5.00
61	Flavour (Aroma)	AG6952ITR Vanilla	EFF	0.13
			TOTAL	100.00



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» Modulation of adipocytes





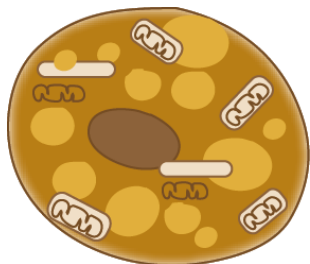
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» Browning

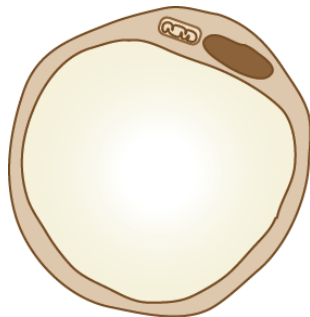
1. Brown

Multiple fat droplets
Many mitochondria
Fat-burning
(thermogenesis)



2. White

Single fat droplet
Few mitochondria
Fat-storing

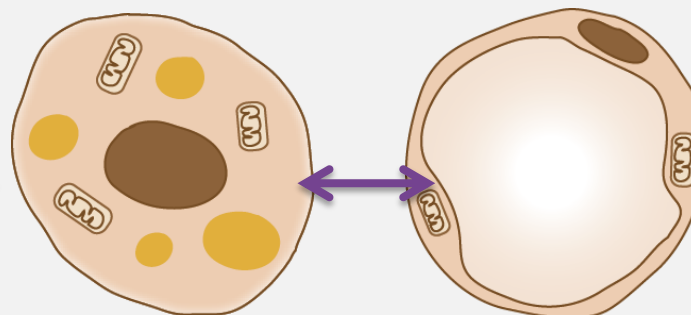


3a. Active beige

Brown-like
Fat-burning
(thermogenesis)

3b. Inactive beige

White-like
Fat-storing

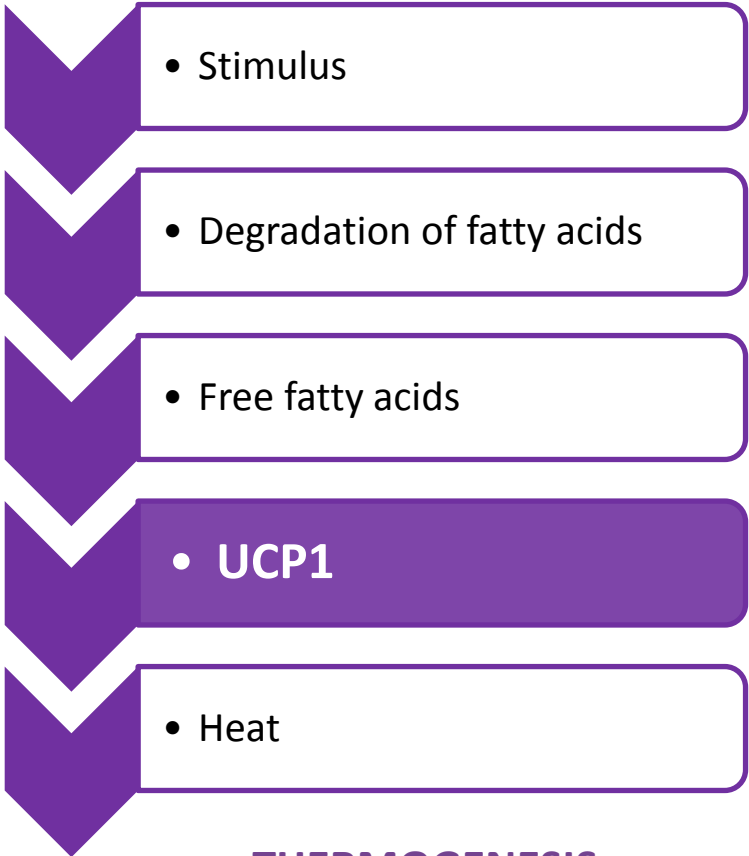


Recently discovered!



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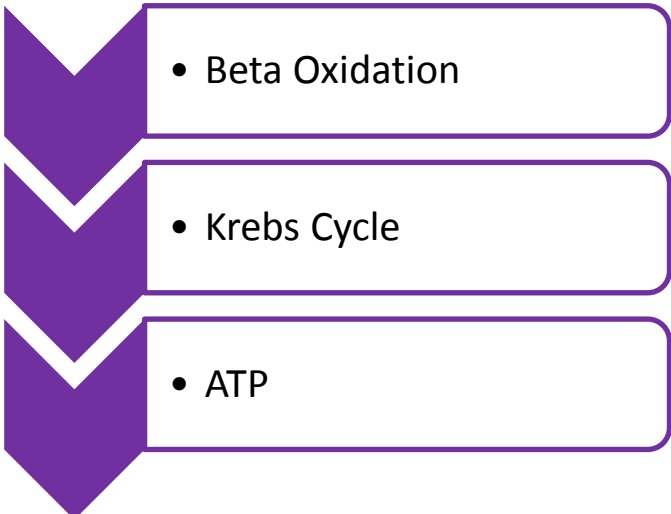
» Thermogenesis



THERMOGENESIS



RESPRATION



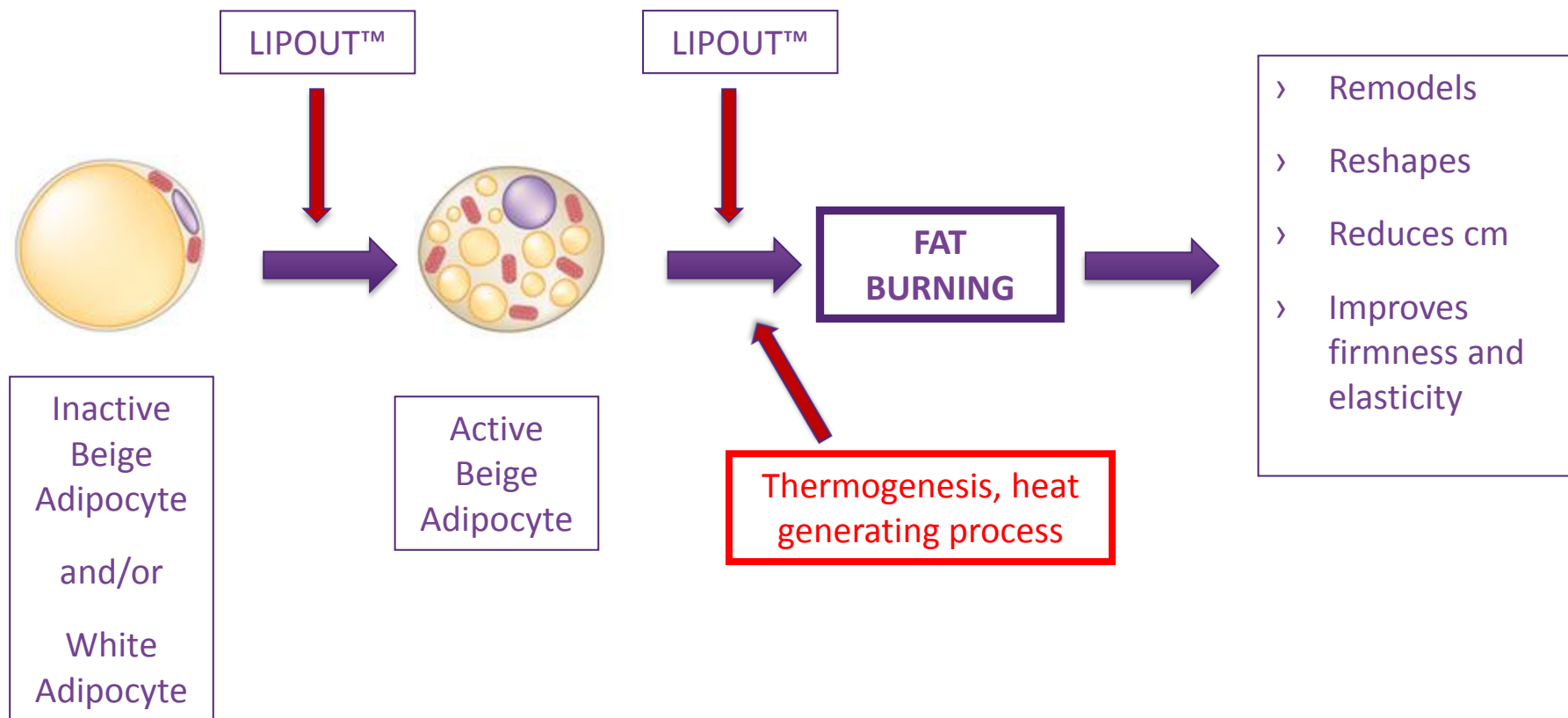


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» Thermogenesis

- › LIPOUT™ transforms fat storing adipocytes into fat burning ones





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» ***Lipout™***: slimming and anti-cellulite marine active

› ***Lipout™*** is obtained from an extract of *Tisochrysis lutea*:

- Unicellular microalgae (*Haptophyta*).
- Standardized in xanthophylls.
- Rich in polyunsaturated fatty acids or PUFA.
- Cultivated in closed photobioreactors with a low environmental impact.
- Renewable sources of active elements.



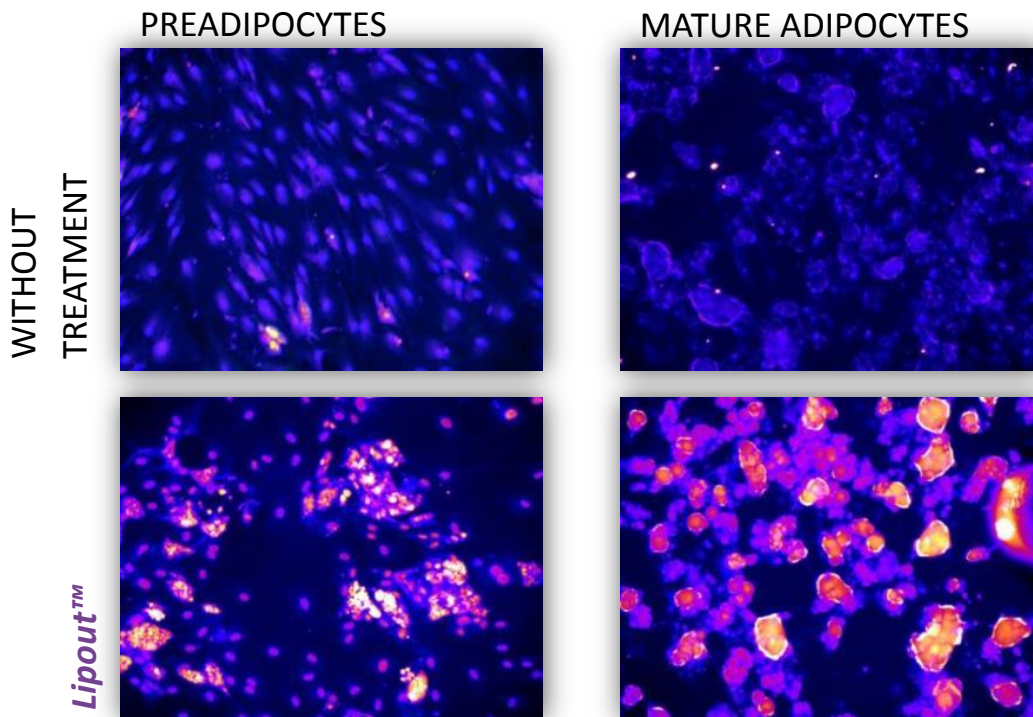


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» *In vitro* efficacy: expression of key proteins in thermogenesis process

Lipout™ increases UCP1 expression, by 50% in preadipocytes and by 378% in mature adipocytes.



Microscope images of UCP1 expression in preadipocyte cultures (left) and mature adipocytes (right), without treatment (upper) and treated with **Lipout™** (lower) (UCP1 is clearly visible as yellowish-red spots)



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» *In vivo* efficacy: protocol

› Slimming and anti-cellulite efficacy of *Lipout™* was evaluated:

- 61 volunteers, men and women, between 18 and 60 years of age, all with a body mass index (BMI) above 23 for women and above 25 for men..
- Creamy gel with 3% *Lipout™* was compared with the same formulation without an active ingredient (placebo).
- 21 women and 10 men applied the placebo and 20 women and 10 men applied the formulation with *Lipout™* twice a day for 2 months.
- Women applied the product to their abdomen, hips and thighs in order to evaluate fat and cellulite reduction; men applied the product to their abdomen only in order to evaluate fat reduction.

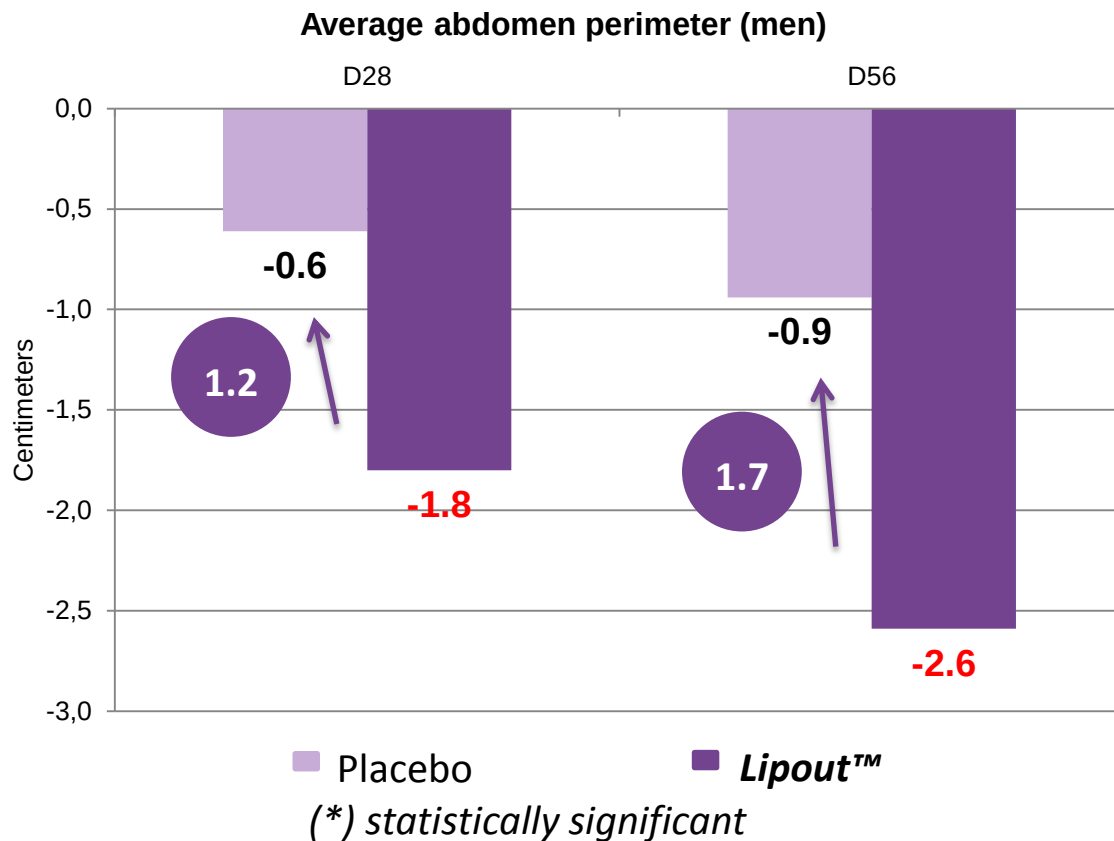




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» *In vivo* efficacy: reduction of fatty layer

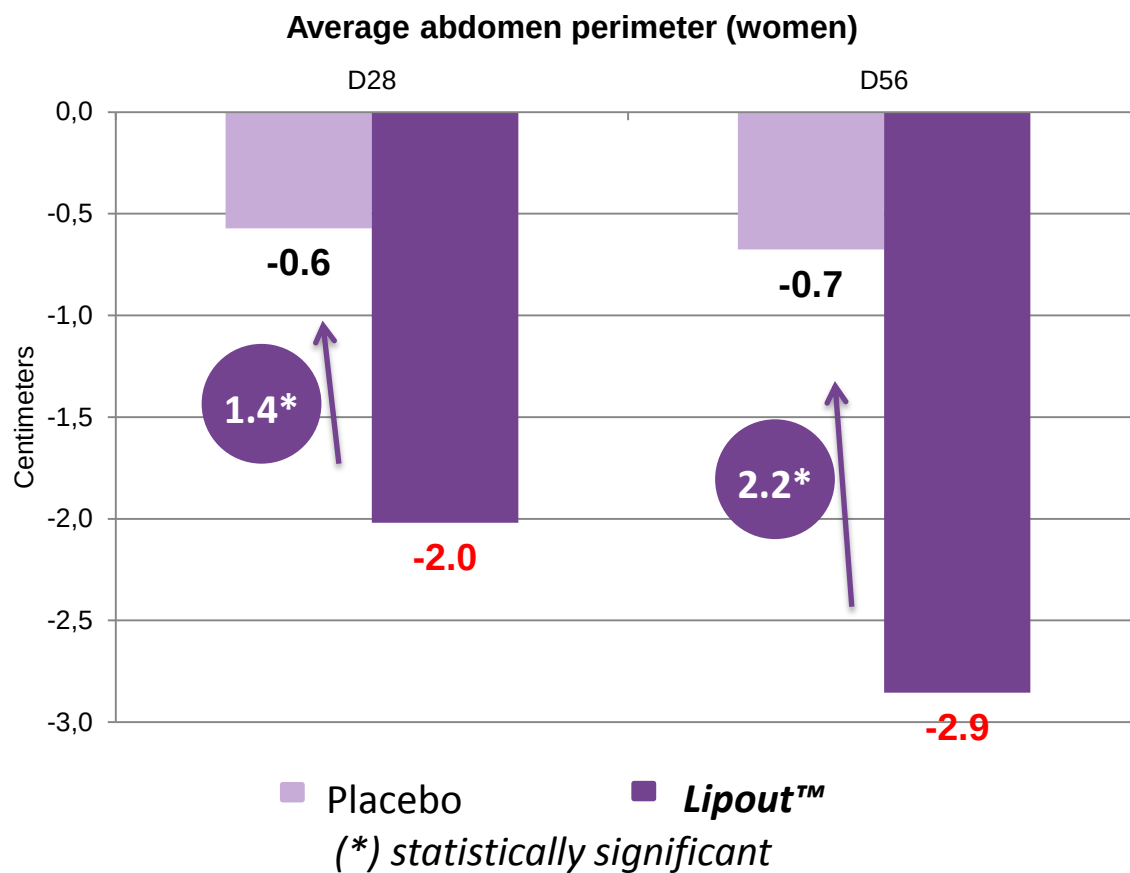




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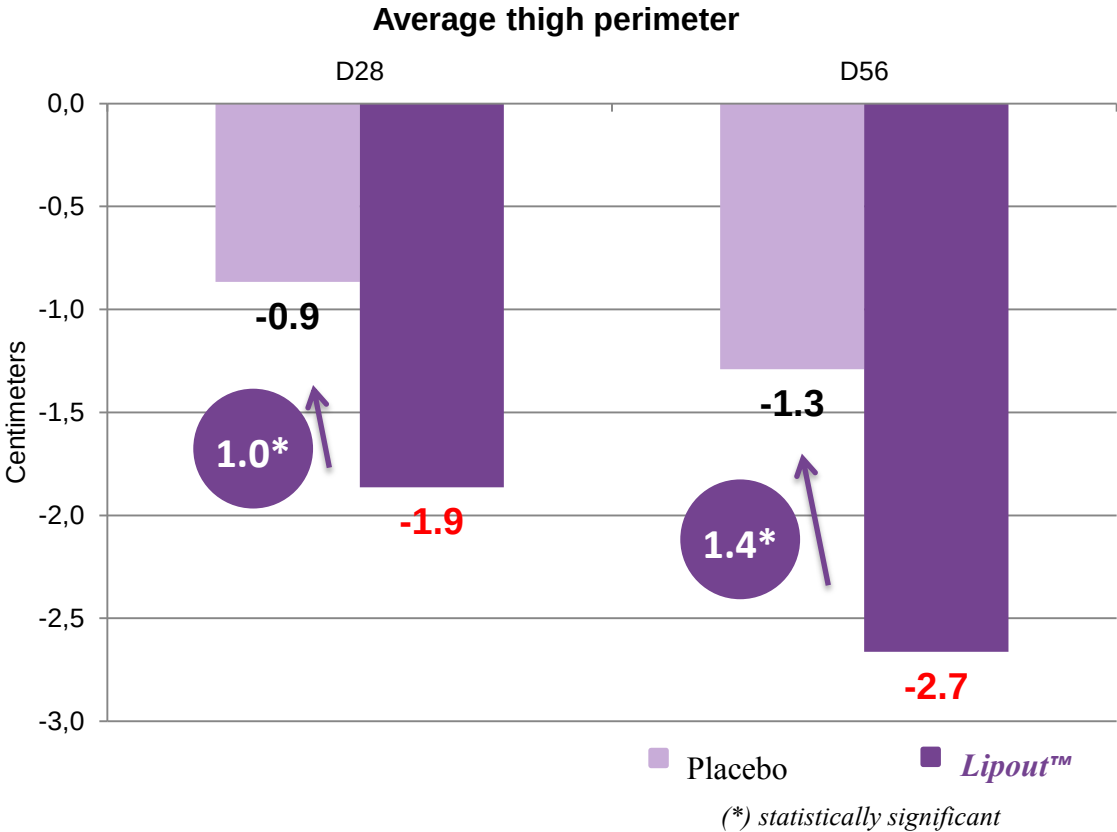
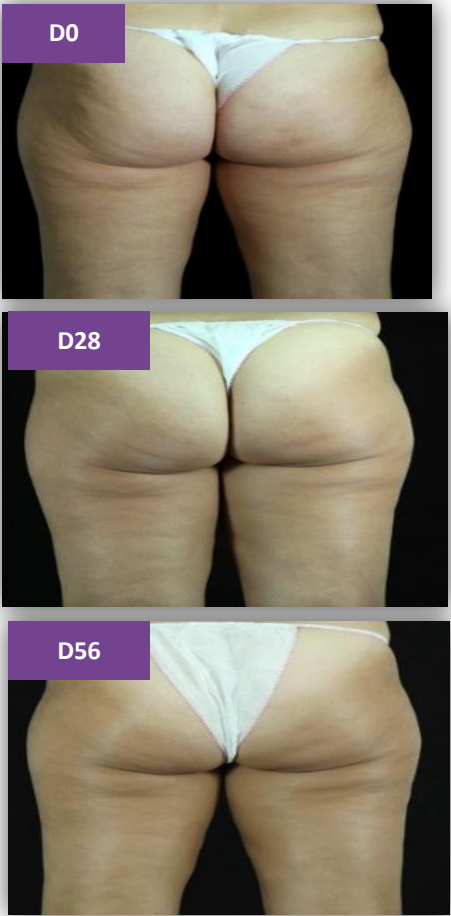
» *In vivo* efficacy: reduction of fatty layer





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» *In vivo efficacy: reduction of fatty layer* //



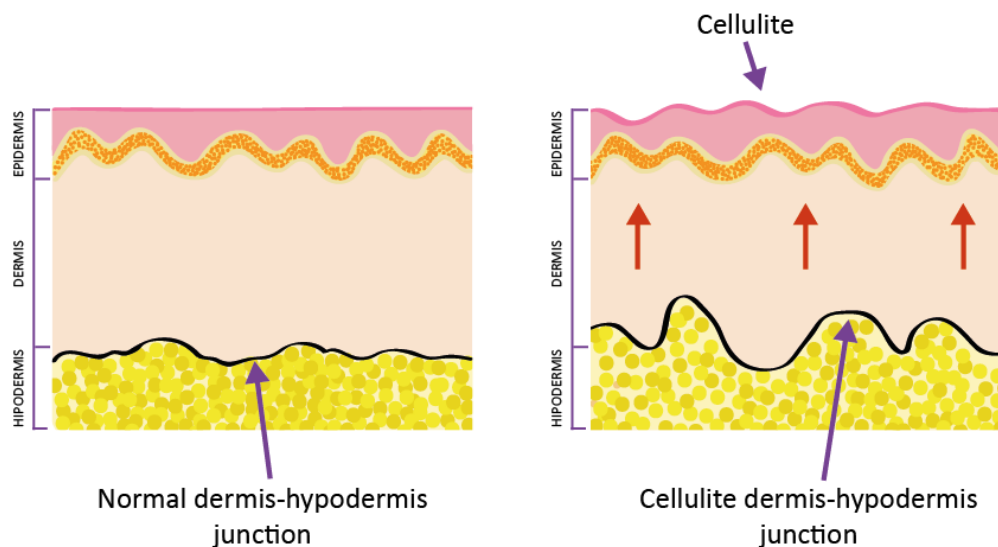


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» *In vivo* efficacy: reduction of cellulite

› Reduction in the length of the dermis-hypodermis junction



***Lipout™* significantly diminishes the length of dermis-hypodermis junction, visibly reducing cellulite**

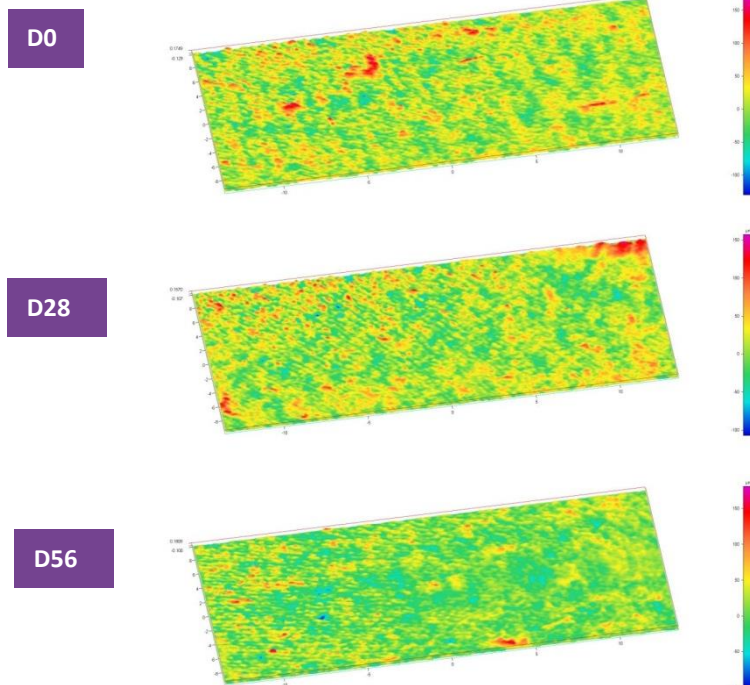


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» *In vivo* efficacy: reduction of cellulite

› Skin roughness (female buttocks area)



Images of skin roughness obtained using PRIMOS on D0, D28 and D56, using a color scale (red = the highest regions or peaks; blue = the lowest regions or troughs, green = the regions with a neutral level)

***Lipout™* significantly smoothes out skin roughness and improves skin appearance**

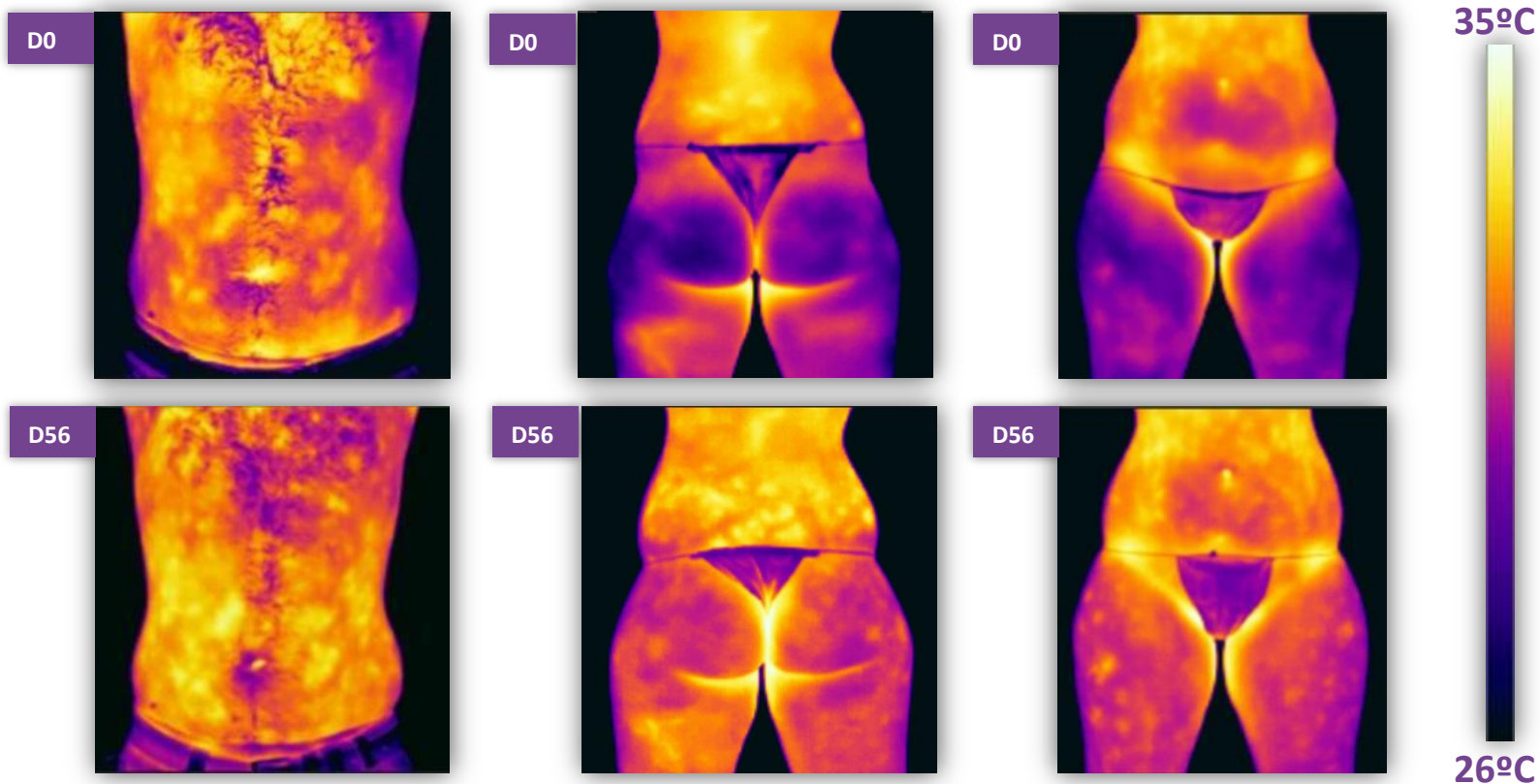


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» *In vivo* efficacy: activation of thermogenesis in subcutaneous adipose tissue

› Skin temperature (thermographic images)





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» Conclusions

- › Burns stored fat.
- › Reshapes silhouette.
- › Reduces body volume.
- › Erases cellulite.
- › Improves skin elasticity and firmness.



Lipout™ activates the processes necessary to stimulate fat-burning, both in men and women, with slimming and anti-cellulite effects



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» Cosmetic applications

- ✓ • Slimming and body-shaping products.
- ✓ • Prevention and treatment of cellulite.
- ✓ • Complementary ingredient in body care products.



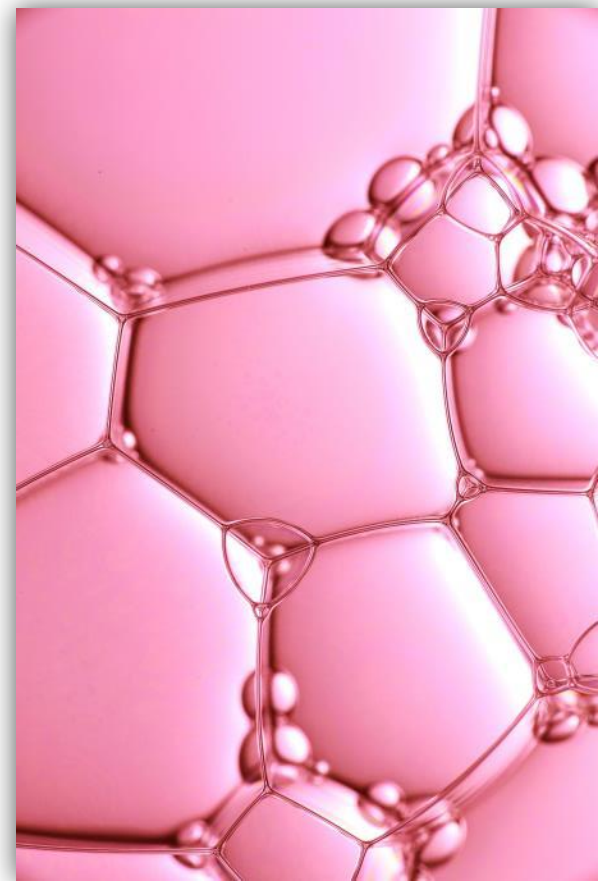


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» Technical information

- › INCI name: Caprylic / Capric Triglyceride, Plankton Extract, Tocopherol.
- › Transparent liquid.
- › Greenish brown color.
- › Soluble in oil.
- › Recommended dose: 1 – 3%.
- › China approved.





Achieve breathtaking results...

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» Slim reducing Concentrate

PHASE	INCI / PCPC	TRADE NAME	SUPPLIER	% (w/w)
11	Aqua (Water)	Deion. Ster. Water		64.65
12	Glycerin	Glicerina	Brenntag	2.00
13	Dehydroxanthan Gum	Amaze XT	National Starch (Akzo Nobel)	1.00
14	Aqua (Water), Tetrasodium Glutamate Diacetate, Sodium Hydroxide	Dissolvine GL-47-S	Akzo Nobel	0.20
15	Pentylene Glycol	MinaCare Pentiol Green	Minasolve	5.00
21	Palmitoyl Proline, Magnesium Palmitoyl Glutamate, Sodium Palmitoyl Sarcosinate	Sepifeel One	Seppic	2.50
22	Persea Gratissima (Avocado) Oil, Ascorbyl Palmitate	Avocado Oil	Provital	5.00
23	Triisostearin	Pelemol GTIS	Phoenix Chemical	3.00
24	Fucus Vesiculosus Extract, Helianthus Annuus (Sunflower) Seed Oil, Ascorbyl Palmitate	Seaweed (Fucus) Oil	Provital	2.00
25	Caprylic / Capric Triglyceride, Plankton Extract, Tocopherol	lipout™	Provital	3.00
31	Aqua (Water), Sodium Hydroxide	Sodium Hydroxide 10%		0.20
41	HDI/Trimethylol Hexyllactone Crosspolymer, Silica	SUNPU-170	Sunjin Chemical	1.00
51	Parfum (Fragrance)	10605P Sculpt	Eurofragrance	0.20
52	Alcohol Denat.	Alcohol Bitrex	Alcoh. Oliva	10.00
61	Bismuth Oxychloride, Mica, Chromium Oxide Green (CI 77299)	Bismica Green	Farmaquimia	0.25
		TOTAL		100.00

Questions?

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