





# PERFECT CURVES AGAINST GRAVITY







#### adifyline®

#### PERFECT CURVES AGAINST GRAVITY

- Hexapeptide identified by a combinatorial chemistry approach from a library of 49,521,980 hexapeptides.
- $\circ$  Screened using the reporter gene assay in a transfected cell line where luciferase expression was controlled by PGC-1 $\alpha$  promoter activity.



### adifyline®

peptide

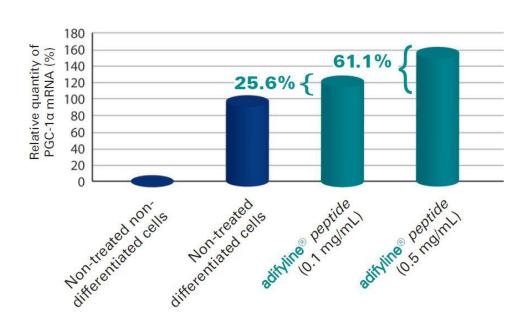
- $\checkmark$  Enhances adipocyte maturation by boosting PGC-1 $\alpha$  expression.
- ✓ Induces a higher lipid accumulation.
- ✓ Increases local volume (cheeks and breasts) by growing adipose tissue volume.





#### IN VITRO EFFICACY (I)

#### 1. Effect on PGC-1α expression



1

- Human preadipocytes were incubated for 24 h in a growth medium and differentiated with preadipocyte differentiation medium (PDM-2) in the presence of ADIFYLINE® peptide.
- After 10 days, cells were lysed, RNA was extracted and reverse transcription was performed. The resulting cDNA was analyzed by quantitative RT-PCR.

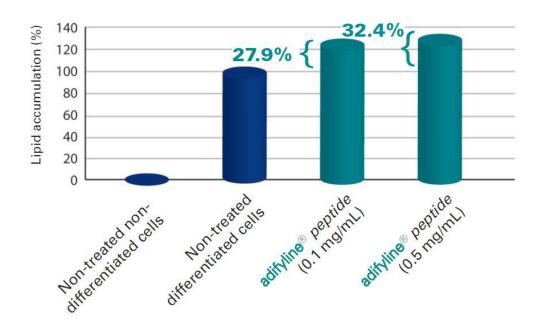
ADIFYLINE® *peptide* promoted PGC-1α expression by more than 61%





#### IN VITRO EFFICACY (II)

#### 2. Effect on lipid accumulation





- ADIFYLINE® peptide was added to human preadipocytes during their differentiation in the PDM-2.
- After 10 days, AdipoRed™ reagent was added to observe fluorescence, which was measured and converted into lipid levels.

Lipid accumulation is higher in cells treated with ADIFYLINE® peptide







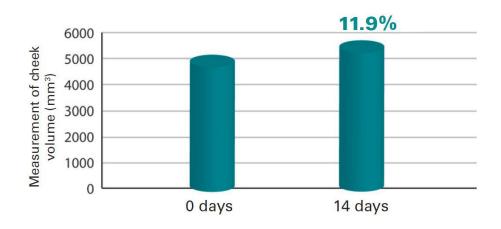
#### IN VIVO EFFICACY (I)

#### 1. Facial volume increase

- o 22 female volunteers (aged between 50 and 60).
- o Application of a cream containing 2% ADIFYLINE® *peptide* solution on the cheeks twice a day for 14 days.
- o Cheek volume was measured at the end of the study.



• Cheek volume was analyzed by Fringe Projection. This technique allows the direct acquisition of the morphology of the studied area in 3D, being able to obtain volume in mm<sup>3</sup>.







Cheek volume increased by 12% after 14 days with ADIFYLINE® peptide



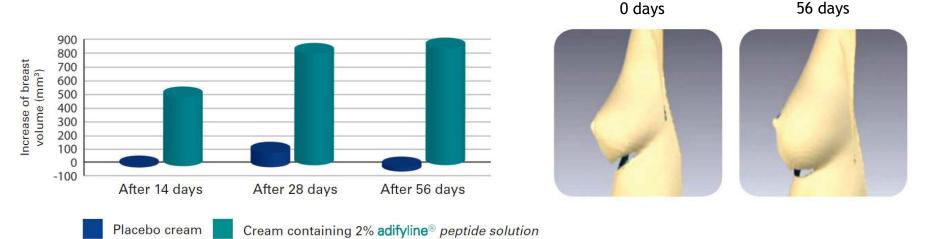
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#### IN VIVO EFFICACY (II)

#### 2. Breast volume increase

- o 22 female volunteers (aged 25 to 40) with a 80-90 European bra cup size.
- o Application of a cream containing 2% ADIFYLINE® peptide solution on a breast and the placebo on the other, twice a day for 56 days.
- o Breast volume was measured at day 14, 28 and 56.



ADIFYLINE® *peptide* improved breast volume by 30-fold compared to placebo after 56 days



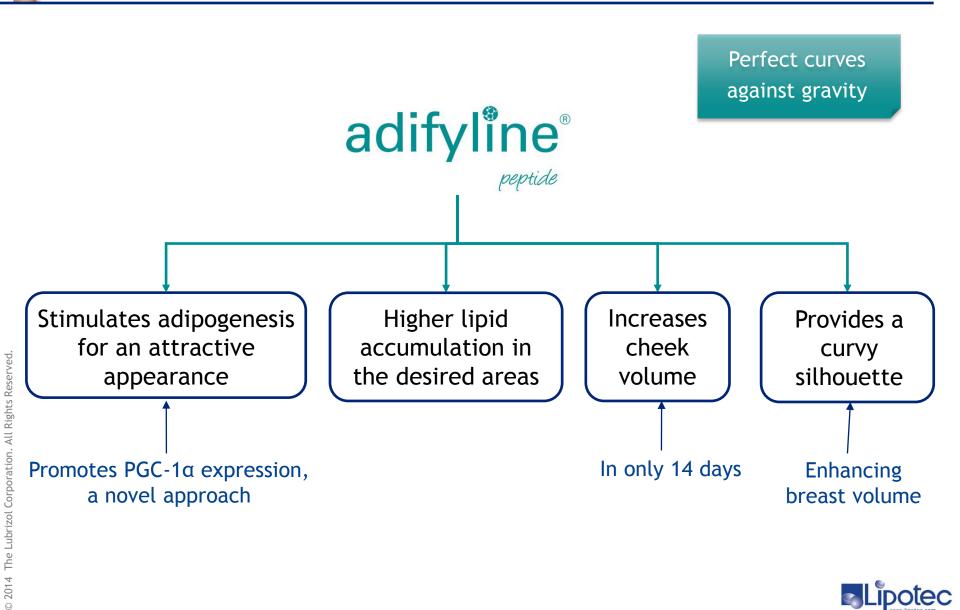
• FOITS technique was used to

measure breast volume.

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#### **COSMETIC BENEFITS**











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