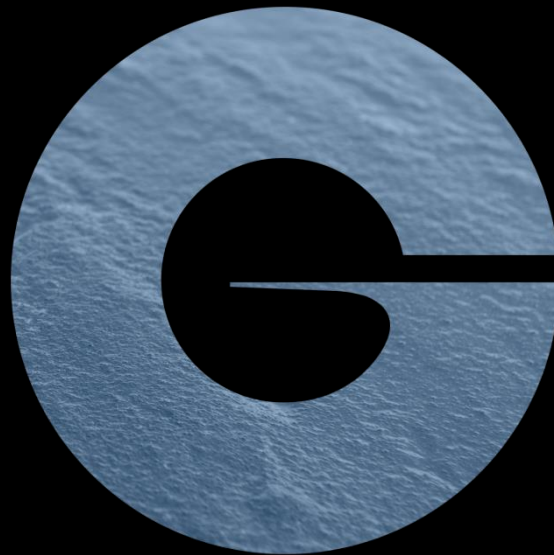


Active Beauty

Sveltam™

Green innovation for slimming



Givaudan

engage your senses

Sveltam™

An exclusive slimming active extracted from natural caffeine.

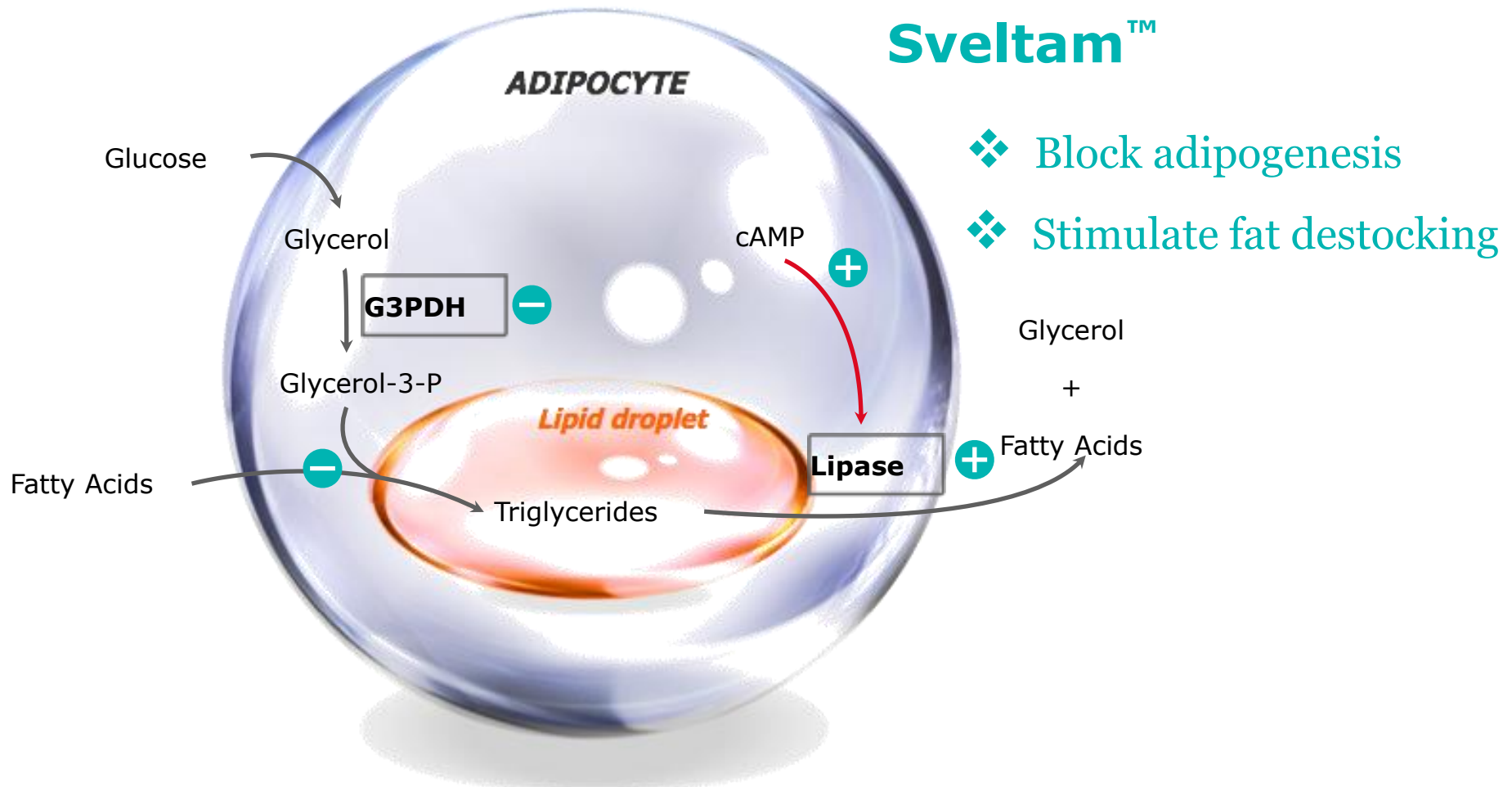
- ❖ Sveltam™ is composed of an isomix of Xanthine derivatives produced by an enzymatic transformation of **natural caffeine**, using an innovative biotechnology process.



- ❖ Sveltam™ is a slimming ingredient which **acts on adipocytes** at two levels:
 - ✓ Block adipogenesis
 - ✓ Stimulate lipolysis

Sveltam™

An exclusive slimming active extracted from natural caffeine.



G3PDH: Glycerol 3-phosphate dehydrogenase

in vitro evaluations



Anti-adipogenesis effect

Measurement of G3PDH activity inhibition

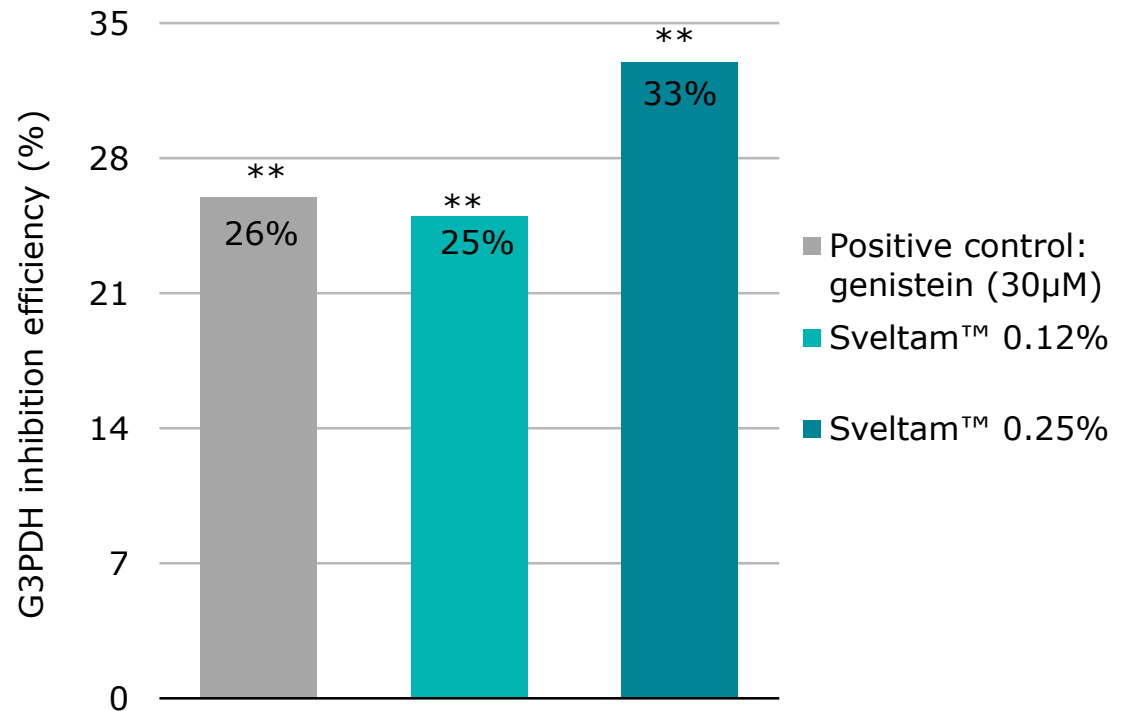
PROTOCOL:

Sveltam™ was tested for its ability to block adipogenesis. G3PDH* activity was measured on preadipocytes 3T3-L1 cultured in adipogenesis inducing medium and treated with different concentrations of the product.

***G3PDH:** *Glycerol 3 phosphate dehydrogenase, enzyme involved in the accumulation of triglycerides*

→ **Sveltam™ significantly inhibits G3PDH enzyme by 33% compared to control.**

Measurement of G3PDH activity



**p≤0.01 compared to control, Student's t Test

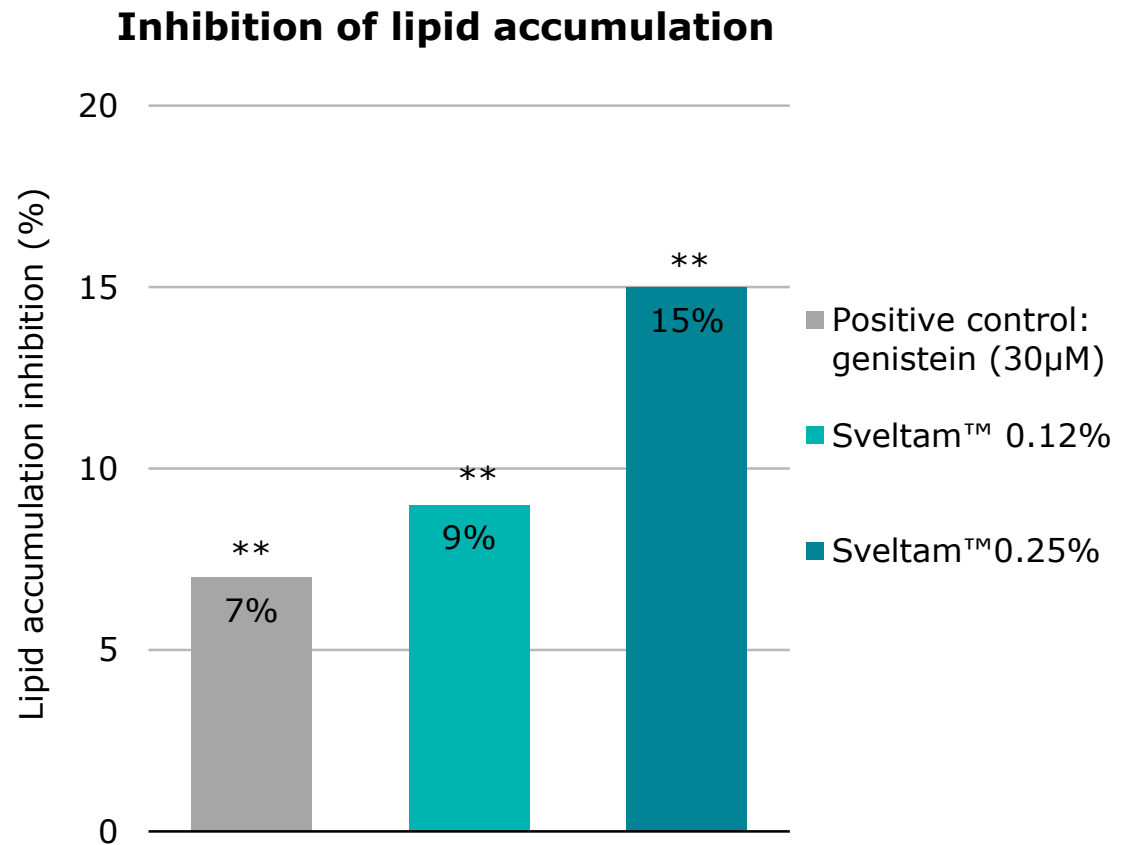
Anti-adipogenesis / anti-stocking effect

Measurement of lipid accumulation inhibition

PROTOCOL:

Sveltam™ was tested for its ability to block adipogenesis. Preadipocytes 3T3-L1 were cultured in adipogenesis inducing medium and treated with different concentrations of the product. The lipid accumulation was evaluated with the Oil Red O staining method.

→ **Sveltam™ significantly decreases intracellular lipids accumulation by 15% compared to control.**



**p≤0.01 compared to control, Student's t Test

Stimulation of lipolysis

Measurement of intracellular cAMP production

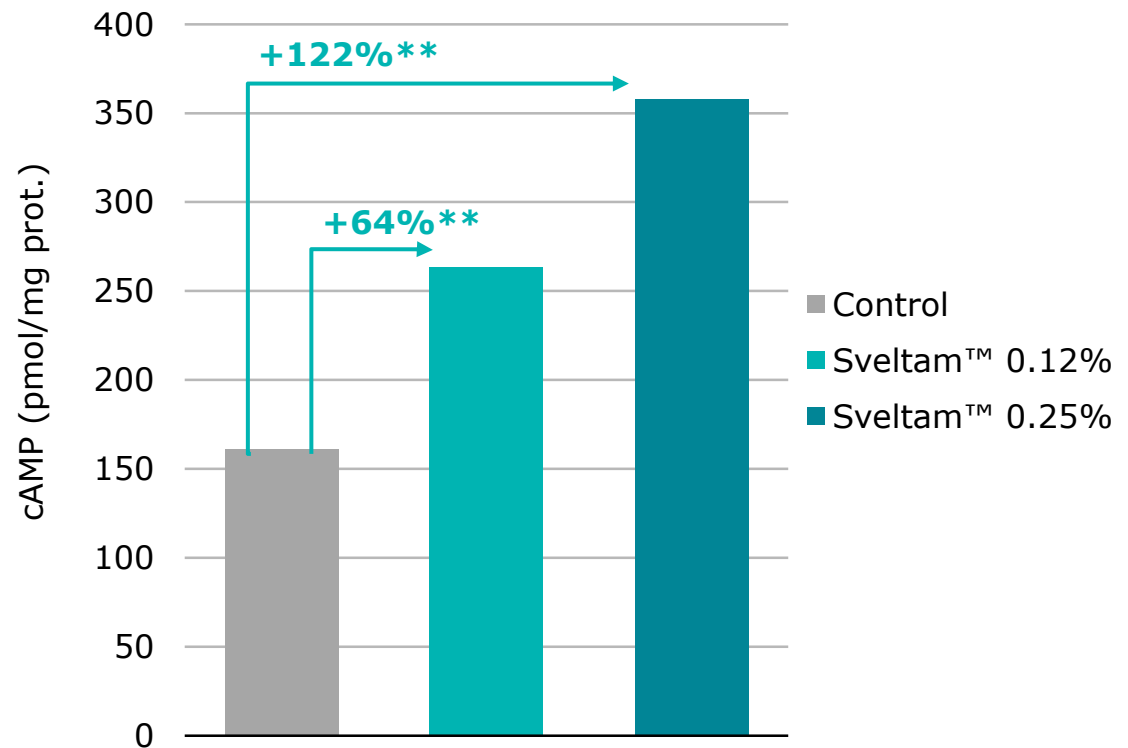
PROTOCOL:

Sveltam™ was tested for its ability to stimulate lipolysis. The intracellular cAMP* was measured on fully differentiated adipocytes treated with different concentrations of the active.

*cAMP: cyclic Adenosine Monophosphate

→ Sveltam™ significantly enhances cAMP up to 122% compared to control.

Intracellular cAMP production



**p≤0.01 compared to control, Student's t Test

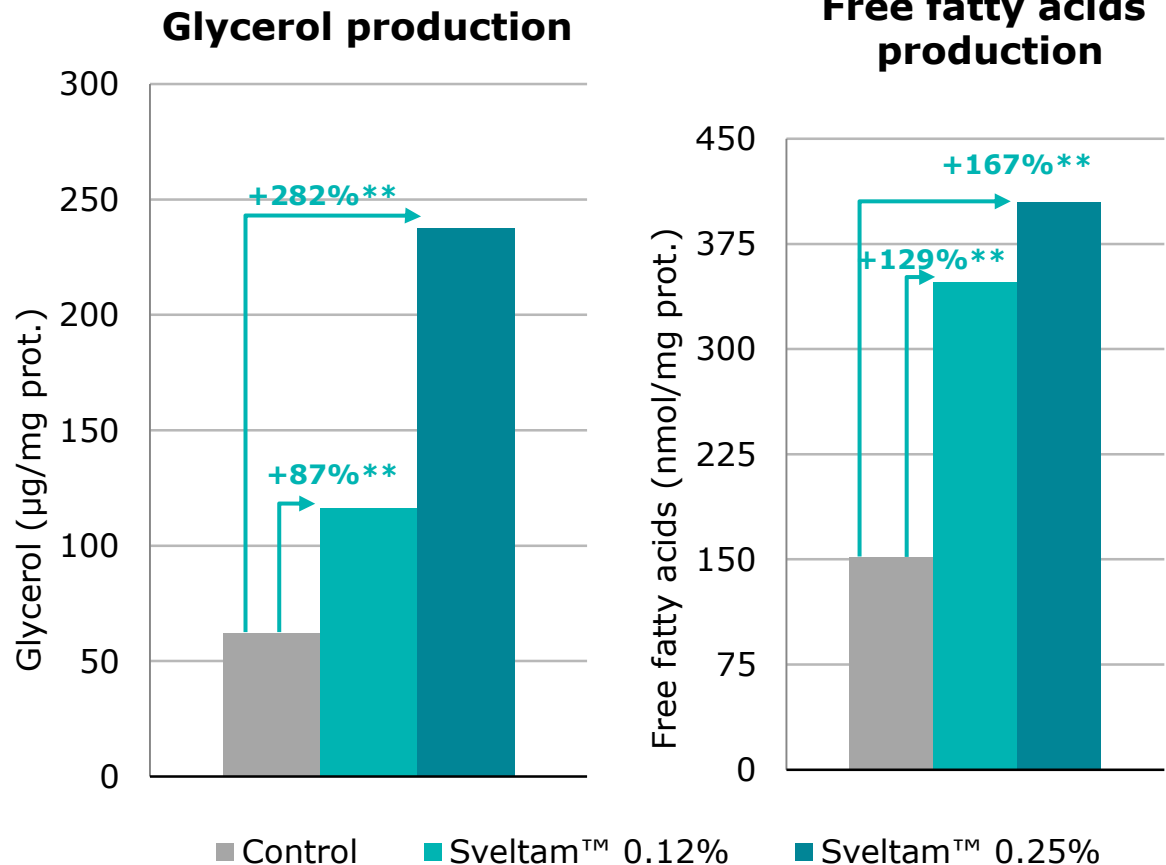
Stimulation of lipolysis

Measurement of glycerol and free fatty acids production

PROTOCOL:

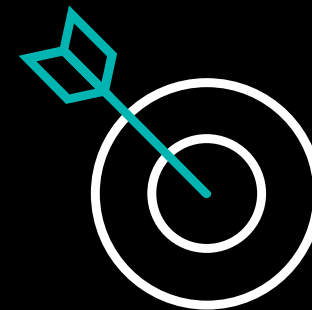
Sveltam™ was tested for its ability to stimulate lipolysis. Therefore, glycerol and fatty acids production (the two products of the lipids stocks hydrolysis) were measured on differentiated adipocytes treated with different concentrations of the active.

→ Sveltam™ significantly increases glycerol and fatty acids production up to 282% and 167%, respectively compared to control.



**p≤0.01 compared to control, Student's t Test

Summary



Technical information

Sveltam™

INCI

Glycerin (and) Caffeine (and)
Theobromine (and) Methyl Xanthine
(and) Paraxanthine

Origin

Vegetal extraction and synthesis

Preservation

Preservative Free

Appearance

Faint yellow solution

Solubility

Water soluble

Dosage

0.5% - 5%

Processing

Can be incorporated in any formula in
liquid form at pH below 7.0 and
temperature below 45°C

Compliance

Thank you

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