

Fytexia

BODY COMPOSITION & METABOLISM

sinetrol®

Adipose beiging benefits

DNF-10®

Protein hydrolysate for satiety

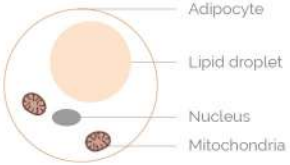
sinetrol®

Adipose beiging benefits

Sinetrol® is a natural combination of polyphenols extracted from citrus and guarana targeting body weight management. Sinetrol® reduces the excess of fat mass and improves long-term body composition.

Adipose tissue: regulation of fat stores through lipolysis

White adipose tissue (WAT) plays a critical role in whole body energy homeostasis. It stores excess energy in the form of triglycerides and releases fatty acids via lipolysis. The ratio between WAT and brown adipose tissue (BAT) regulates the level of energy expenditure, which is unbalanced in overweight and obese people.
Beiging of adipose tissue confers beneficial effects on adiposity.



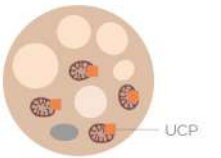
WHITE ADIPOSE TISSUE
(WAT)

The most common fat cell, used to store fat; mainly found in subcutaneous trunk areas



BEIGE ADIPOSE TISSUE
(BRITE) *brown-in-white*

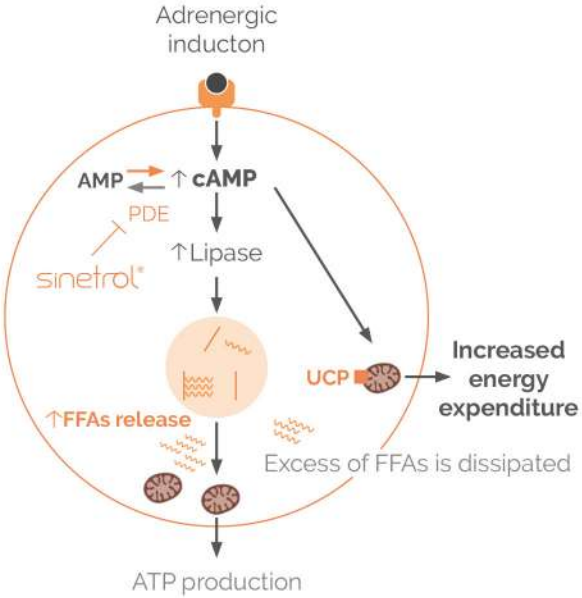
Transitory brown-like phenotype cell within white tissue



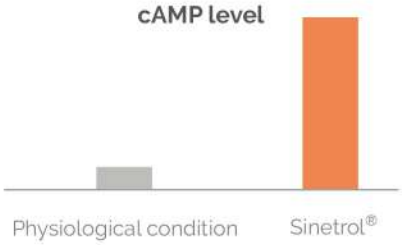
BROWN ADIPOSE TISSUE
(BAT)

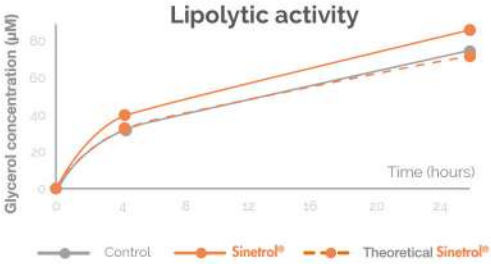
Destores excess of fat released from WAT through an increase in basal metabolic rate, i.e. a higher rate of calories burning

Sinetrol® - Mechanism of action

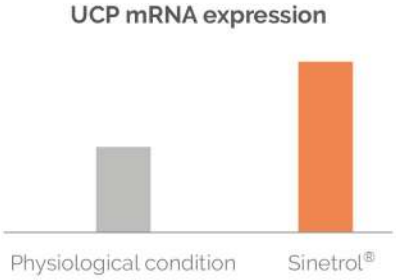


1 / SINETROL® ENHANCES PHYSIOLOGICAL LIPOLYSIS THROUGH PDE-INHIBITION





2 / SINETROL® INTENSIFIES FFAs METABOLIZATION THROUGH UCPs EXPRESSION PROMOTION



Increase in cAMP level induced by Sinetrol® promotes higher expression of UCPs as in beige adipose tissue.

→ Increased energy expenditure from excess of FFAs released during lipolysis

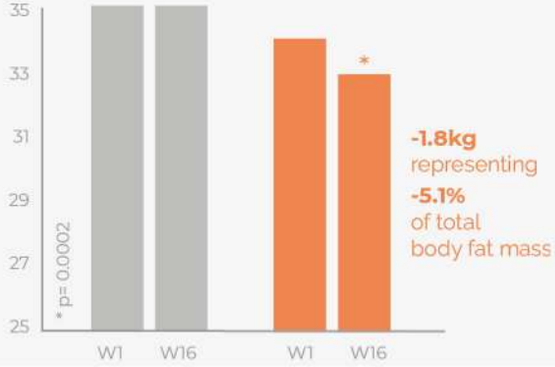
Resting Energy Expenditure
(Kcal/day)



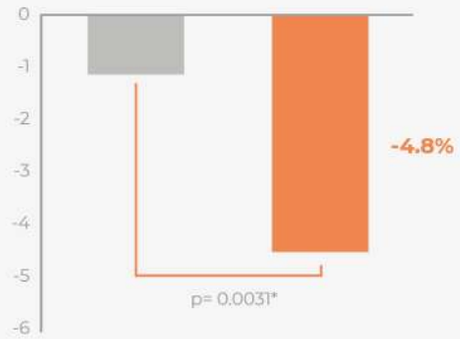
- The increase in metabolic rate leads to a **significant reduction of the total body weight loss of the subjects, especially fat mass,** compared to the *placebo* group.
- Body composition is rebalanced: **lean to fat-mass ratio significantly improves with Sinetrol®.**
- **65% of the total fat loss is from the trunk area:** the Index of Central Obesity decreases significantly.
- Waist & hip lines significantly decrease.

Primary outcome: body fat mass reduction

Body fat mass - *Caucasian population*
(kg) W1-W16

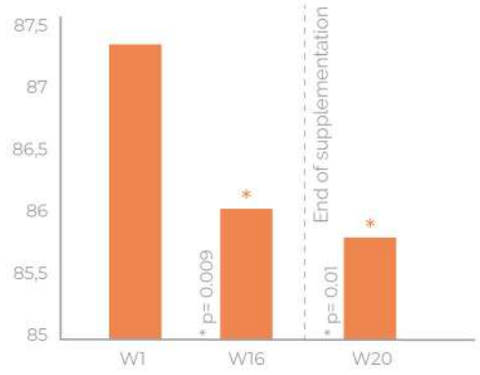


Body fat mass variation - *Asian population*
(% on total body fat mass) ΔW1-W12

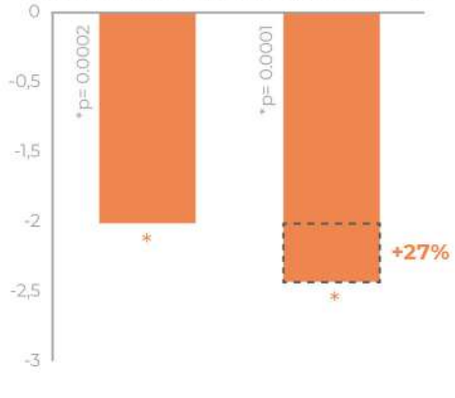


Sinetrol® supports long-lasting benefits

Body weight
(kg) W1-W16 & follow-up W20



Fat mass loss
(kg) ΔW1-W16 & follow-up ΔW1-W20



1 month after end of the supplementation:

- **Subjects continue to lose body weight**
- **Subjects continue to reduce body fat mass**

SCIENCE SUPPORTING SINETROL®

More than 10 years of research[1,2,3,4]

IN VITRO | PRE-CLINICAL STUDIES | PILOT CLINICAL STUDIES | PIVOTAL CLINICAL STUDIES

Sinetrol® has been studied on a total of 300 subjects and its benefits have been demonstrated using gold-standard methodology during interventional studies with follow-up.

PIVOTAL CLINICAL STUDIES

EFSA compliant methodology
Double-blind, randomized, *placebo*-controlled

2017 **20 weeks (16+4)**	**2019** **12 weeks**
77 subjects Caucasian population BMI: 25-40 kg/m² Age: 29-52 years old	**86 subjects** Asian population BMI: 24-30 kg/m² Age: 25-62 years old
Body composition DXA scan	**Body composition** DXA scan
Recommended individualized **normo-caloric diet** *(Harris and Benedict)*	Recommended **hypo-caloric diet** *(-500 kcal/day)*
CAPSULES 2 x 450 mg/day	**TABLETS** 1 x 900 mg/day

Placebo
Sinetrol®

Weight management – Adipose beiging benefits

COMMERCIAL NAME	**Sinetrol® Xpur C**	**Sinetrol® Xpur**
COMPOSITION	Citrus and guarana extracts	Citrus and guarana extracts
ACTIVE COMPOUNDS	Flavanones (HPLC 280 nm) > 40% Naringin Hesperidin Caffeine 3.3-4%	Flavanones (HPLC 280 nm) > 20% Naringin Hesperidin Caffeine 1-4%
RECOMMENDED DOSAGE	630 mg/day	900 mg/day
APPLICATIONS	Dietary supplements	Dietary supplements
OTHERS	No allergen, non-GMO, halal, gluten-free	No allergen, non-GMO, halal, gluten-free

References

1 - Dallas C. et al.; *Phytomedecine;* 2008, 15: 783-792
2 - Dallas C. et al.; *Phytother. Res.;* 2014, 28(2): 212-218
3 - Cases J. et al. ; publication pending
4 - Park S. et al; *J. Med. Food;* 2020, 23(3): 1-8

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease. Before participating in any diet or exercise program, please consult your physician.

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