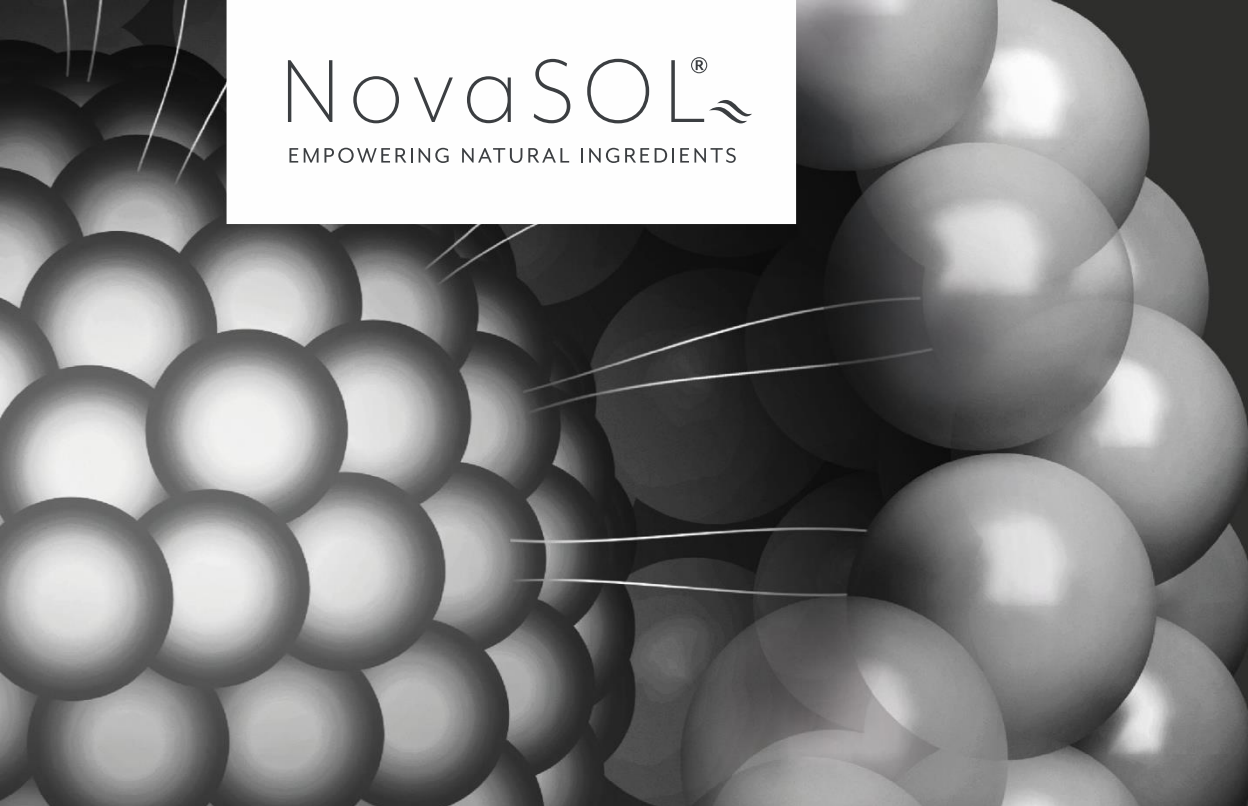


NovaSOL®  
EMPOWERING NATURAL INGREDIENTS



# SOLUTIONS

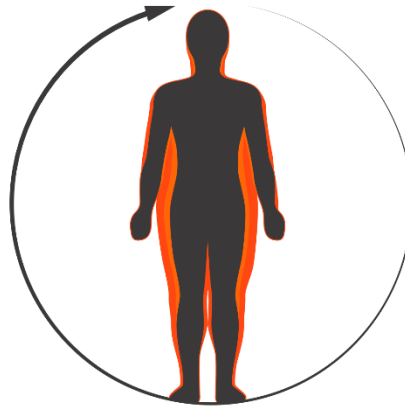
MADE IN GERMANY

Because structure matters.



# NovaSOL® SUSTAIN

- Sustainable weight management



## Key characteristics

- Scientifically based weight management
- Dietary supplement with well approved ingredients
- May physiologically support
  - ☑ **Sustainable** weight reduction & management
  - ☑ **Blood health** (lower insulin resistance / HOMA-Index)



## Key features

- ✓ Superior formulation for new galenics
- ✓ High bioavailability
- ✓ Clinically proven (see study results)
- ✓ Rapid delivery to blood plasma
- ✓ Based on nano sized micelles
- ✓ Biomimetic technology approach
- ✓ Ingredients with highest quality + pharma GMP production
- ✓ 100% water and fat soluble
- ✓ Protected by granted patents
- ✓ Powered by NovaSOL® (technology cobranding options)
- ✓ Bulk soft gels or ready to use solubilisate
- ✓ Complementary to weight loss products

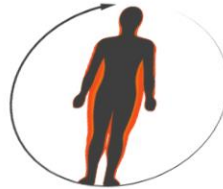


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## SUSTAIN

**SUSTAIN** – Supporting sustainable weight management

- Scientific evidence for weight management support
- Patented formula of approved supplement ingredients
- May physiologically support
- Sustainable weight reduction & management
- Blood health (lower insulin resistance / HOMA-Index)
- Rapid delivery to blood plasma
- Complementary to weight loss products



### Synergistic actives in a patented formula

Contains the two endogenous active ingredients coenzyme Q10 and alpha lipoic acid:

- **Coenzyme Q10**
  - Enhances fat burning
  - May lead to reduction of fat and bodyweight
- **alpha-lipoic acid**
  - Physiological effect in brain, which accelerates satiety
  - May have a positive effect on body weight and facilitate successful weight management

Proprietary and patented (EU patent no. 1781119) combination of Coenzyme Q10 and alpha-lipoic in NovaSOL® SUSTAIN enables a high and simultaneous absorption to unfold a weight management relevant and synergistic effect

05/2022

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**Empowered by NovaSOL®**

- Biomimetic – a nature like micelle structure
- Fast absorption & superior bioavailability
- Patent protected formula
- No chemical modification
- High mechanical, thermal & pH stability
- Pharma GMP quality



### Clinically proven

Doctoral thesis:

"Support for a weight loss program with coenzyme Q10 and alpha lipoic acid in a micellar water-soluble formula" /  
"Unterstützung eines Gewichtsreduktionsprogramms durch Coenzym Q10 und Alpha-Liponsäure in micellierter wasserlöslicher formula"  
[📄 \(LINK\)](#)

### Available as bulk and finished private label

- NovaSOL® SUSTAIN softgels
- Each capsule provides 22.5 mg coenzyme Q10 and 25 mg alpha lipoic acid

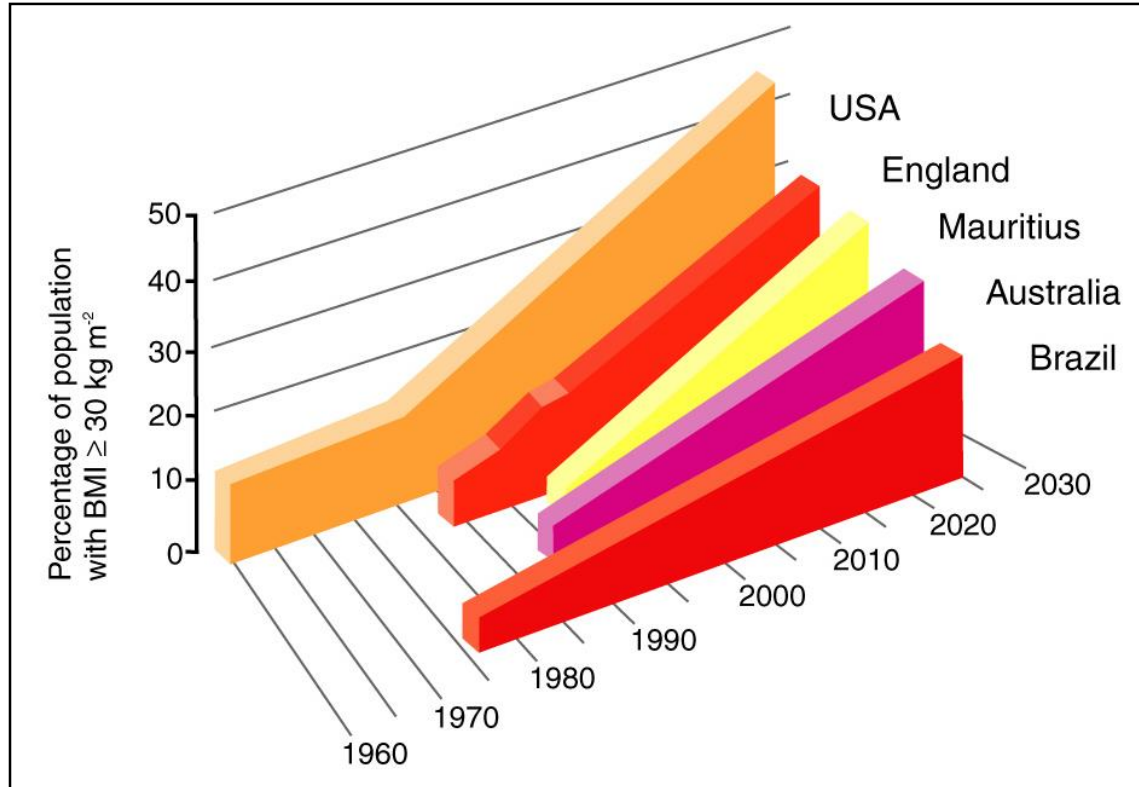


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# NovaSOL<sup>®</sup> SUSTAIN: Background on obesity

% of population with BMI >30 kg/m<sup>2</sup>



Bodyweight (kg)  

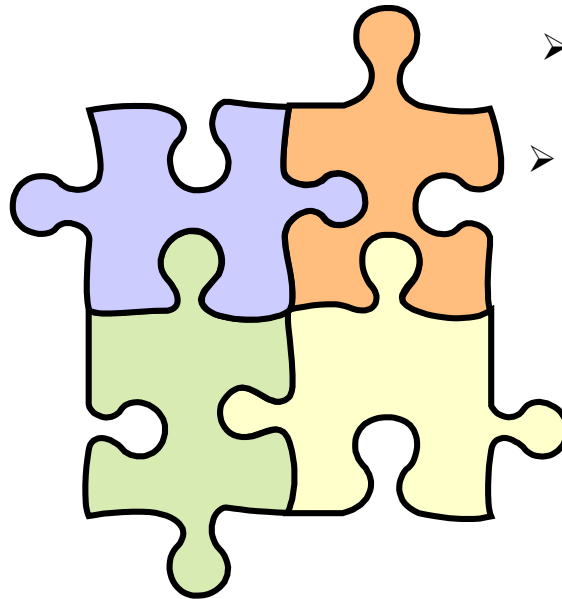
$$\text{BMI} = \frac{\text{Bodyweight (kg)}}{[\text{Height (m)}]^2}$$

Classification	BMI (kg/m <sup>2</sup> )
Underweight	<18,5
Normal weight	18,5 – 25
Overweight	25 – 30
Obesity	≥30
Level I	30 – 35
Level II	35 – 40
Level III	>40

## Study Rational – synergistic actives

### Coenzyme Q10

- enhances fat burning
- should, if taken regularly as a dietary supplement, lead to a reduction of fat and bodyweight



### α-lipoic acid

- exerts a physiological effect in the brain, which accelerates satiety.
- If taken regularly as a dietary supplement, it should have a positive effect on body weight and facilitate successful weight management

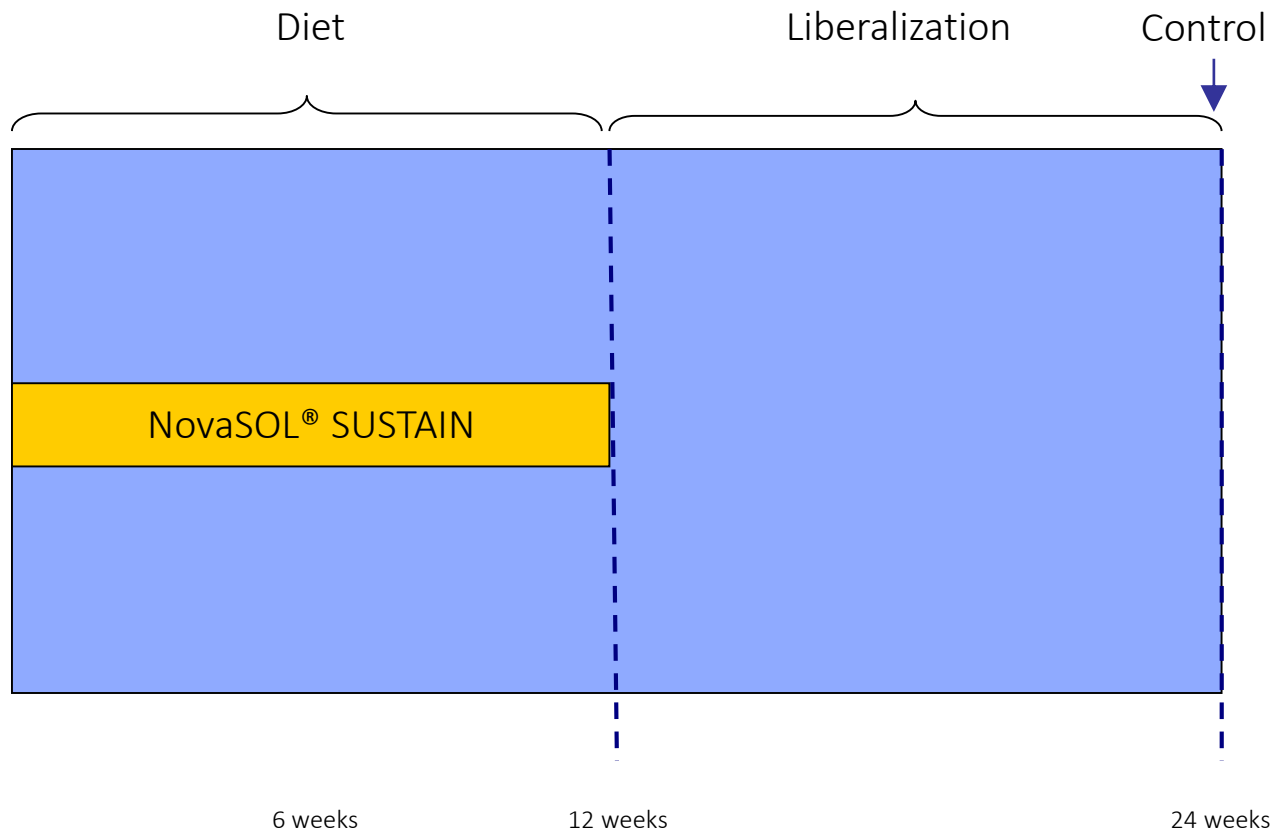
Combining both ingredients in a dosage form, which allows a high and simultaneous absorption might result in synergistic effects. Alpha-Lipoic Acid and CoQ10 can “act jointly” and might have an beneficial effect on long-lasting fat loss.

## Research design – clinical trial 2009 / 2010

- Title: “Development of a preparation for the stabilization of lipid metabolism after successful weight reduction” (Pro Inno II, BMWi)
- Type: randomized, double-blind, placebo-controlled study
- Conducted in cooperation with University of Stuttgart Hohenheim, Germany
- Participants: 22 overweight adults (BMI 27-33)
  - 11 Patients with supplement (verum group)
  - 11 Patients with placebo
- Duration: 12 weeks / follow up after 24 weeks
- Supplementation of verum group:
  - Per day: 100 mg ALA and 90 mg CoQ10
  - Supplemented via 4 soft gel capsules (equals 1,800 mg NovaSOL® SUSTAIN)
- Study parameters: Body fat, body composition, waist/hip circumference



## Research design



## Study results – weight reduction

- Verum group reduced body weight by 2.3 kg  
→ 77,8kg in week 12 vs. 80,1kg at baseline
- Placebo group gained 0.2 kg in body weight

## Study results – HOMA Index

- HOMA Index:
  - HOMA = Homeostasis Model Assessment
  - Used to indicate insulin resistance (IR)
  - Calculation:  $\text{Insulin } (\mu\text{U/ml}) \times \text{Glukose (mmol/l)} / 22,5$
  - Categorization: values  $>2$ = indicates IR,  $>2,5$ = IR likely,  $>5,0$  = average of type 2-diabetes
  
- Study results on HOMA:
  - In the verum group, the HOMA-index significantly improved  
→ 1,5 in week 12 vs. 2,4 baseline
  - Decrease in the HOMA-index in the placebo group was not statistically significant.

## Study results – references

- Clinical trial publication draft  
(„A micellar formulation of coenzyme Q10 and  $\alpha$ -lipoic acid may be a useful aid in weight reduction programs”, August 2013)
- Doctoral thesis clinical trial  
(“Unterstützung eines Gewichtsreduktionsprogramms durch Coenzym Q10 und Alpha-Liponsäure in micellierter wasserlöslicher formula“, ISBN 3-89959-226-3)

## NovaSOL® SUSTAIN: product reference China (CBEC)

