

**nutrabiol.**

# Premium plant-based ingredients for enhanced nutrition

[btsa.com](https://btsa.com)

Designed  
by Nature

**Btsa**



Designed by Nature

BTSA has developed a series of natural ingredients and additives for nutraceutical products with the aim of promoting good nutrition among people. Natural antioxidants extend the shelf life of products (Natural Tocopherols), while active ingredients enrich the formulas (Natural Vitamin E and Omega 3), providing added value to the quality of products and preserving the qualities of active ingredients to achieve better health results.

Today's consumers demand foods that meet basic nutritional requirements, but they also increasingly value those that have positive effects on their health. Nutraceutical products promote healthy eating and are part of a balanced diet. At BTSA we have been developing natural ingredients and tailor-made products for different nutraceutical applications since 1994. In addition, we have sales offices in Spain and the United States, and a distribution network that currently allows us to reach more than 50 countries on five continents.

# Products

Product	NUTRABIOL®	NUTRABIOL® Organic	NUTRABIOL® Blends	NUTRABIOL® T	NUTRABIOL® E
Description	Tocopherol-based natural antioxidant	Tocopherol-based on natural antioxidant	Synergistic blends based on Nutrabiol	Mixed Tocopherol concentrates	Natural Vitamin E
Composition	Tocopherol, Monoglycerides, Squalene, Sterols	Organic Tocopherol, Monoglycerides, Squalene, Sterols	Nutrabiol® + other AOXs (Rosemary Extract, Green Tea Extract, Ascorbyl Palmitate)	Tocopherol	d-alpha Tocopherol / d-alpha Tocopheryl Acetate / d-alpha Tocopheryl Hydrogen Succinate
100% Natural	●	●	●	●	●
Organic Compliant		●			
Soybean Base	●	●	●	●	●
Sunflower Base	●		●	●	
Non-GMO	●	●	●	●	●
Kosher	●	●	●	●	●
Halal	●	●	●	●	●
Allergen Free	●	●	●	●	●
Gluten Free	●	●	●	●	●

# Antioxidant Systems



Oxidative rancidity is the process in which fats produce unpleasant organoleptic compounds due to exposure to oxygen. Light, heat or moisture can accelerate this process.

An antioxidant is any substance or element that is capable of delaying or preventing the development of rancidity or the deterioration of fats due to oxidation.

At BTSA we have developed a complete range of antioxidant systems based on tocopherols to protect fats and oils from oxidation and extend their shelf life.

Antioxidant Systems

Main Antioxidant Applications

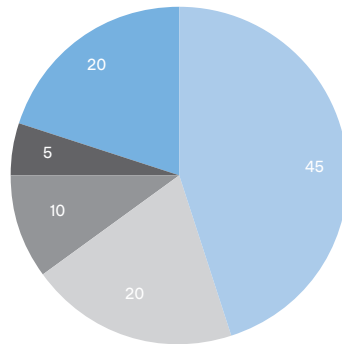
Baby Food  
Food Supplements  
Soft Capsules  
Sports Nutrition  
Energy Sticks  
Dairy Products

# Natural and sustainable protection

Nutrabiol® is a natural antioxidant made from natural tocopherols from non-GMO vegetable oil. It is an excellent product for protecting nutritional supplements, preserving their active ingredients and increasing product shelf life. Nutrabiol® is a 100% natural product developed exclusively by BTSA, and is unique on the market.

- 100% Natural Antioxidant
- Nutritional supplement stability
- Active ingredient protection
- Available in soy or sunflower base

- Tocopherols
- Vegetable Oil
- Monoglycerides
- Plant Sterols
- Squalene



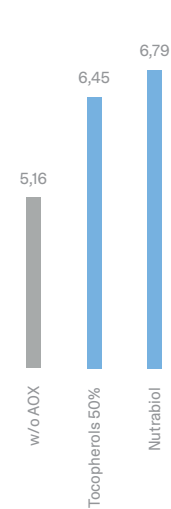
## How does Nutrabiol® works?

The high antioxidant power of Nutrabiol® is the result of the synergy between its active ingredients such as tocopherols, squalene and sterols, which are found naturally in the product. Nutrabiol® confers stability to nutraceutical product formulations, thus protecting the multiple health benefits provided by the active ingredients they contain.

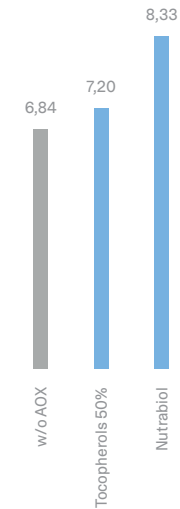
## Why choose Nutrabiol® over other Mixed Tocopherols Concentrates?

- Better performance
- Less cost-in-use
- Higher emulsifying capacity
- Better dispersion

Rancimat Test at 110°C  
Sunflower Oil + AOX  
(1000ppm)



Rancimat Test at 110°C  
Soybean Oil + AOX  
(1000ppm)



# Premium quality, 100% organic

Nutrabiol® Organic is the only 100% organic tocopherol-based antioxidant on the market that helps extend the shelf life of nutritional supplements and dietary products. It is certified organic according to EU Regulation 834/2007 and the National Organic Program (NOP) of the United States Department of Agriculture (USDA).

- Unique 100% tocopherol-based organic antioxidant
- Unlimited use in organic products
- Has no effect on the final product's color or smell
- It protects active ingredients of the formula

## Solve your oxidation problems with Nutrabiol® Organic!

Nutrabiol® Organic is specifically designed for the manufacture of organic nutraceutical products. Its unrivalled antioxidant activity comes from its composition based on a mixture of Tocopherols. In line with its commitment to sustainability, Nutrabiol® Organic has a low impact on the environment, as no synthetic solvents have been used for its extraction, nor have aggressive chemicals of any kind been used throughout the production process. It is ideal for products that claim to be organic.

## Why Nutrabiol® Organic?

- European Origin
- No Organoleptic Effects
- Contributes to Sustainability
- Objectives

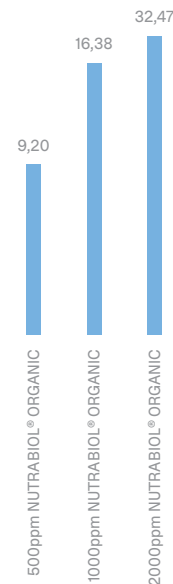
NUTRABIOL® ORGANIC is the first tocopherol based antioxidant certified organic under the EU Regulation 834/2007 and the National Organic Program (NOP) of the United States Department of Agriculture (USDA)

The NOP distinguishes three categories of products:

1. Organic
2. Made with Organic
3. Specific Organic Ingredients



Sunflower Oil at 120°C  
Oxidative Stability %



# Synergistic blends, maximum antioxidant power

Nutrabiol® Blends is the range of natural antioxidants that combines Nutrabiol® with various ingredients, achieving a synergistic effect that significantly increases the antioxidant power of the products. BTSA specializes in developing customized antioxidants and tailor-made blends for each type of nutraceutical application, adapting to the specific needs of each client.

- High Antioxidant Potency
- Customized Solutions
- Effective at low doses
- No Organoleptic Effects
- Protects the functionality of Active Ingredients
- Maximum Health Benefit

## Solve your oxidation problems with Nutrabiol® Blends!

No matter what the application, at BTSA we have the most suitable antioxidant for your product. Available combinations include references with Ascorbyl Palmitate (Vitamin C), Lecithin. Our experienced team of professionals will advise you on how to develop the best antioxidant for your product.

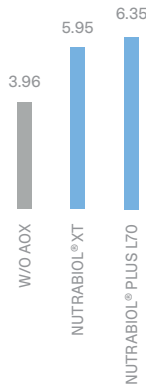
## Why Nutrabiol® Blends?

BTSA develops customized antioxidants and tailor-made blends for each type of food application, according to the specific needs of each client.

Blends are available with Ascorbyl Palmitate (Vitamin C), Green Tea Extract, etc.

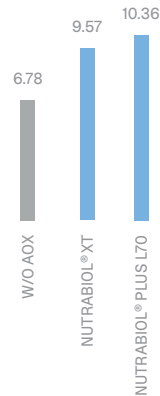
Rancimat Test at 110°C  
Sunflower Oil + AOX (1000ppm)

Rancimat Hours



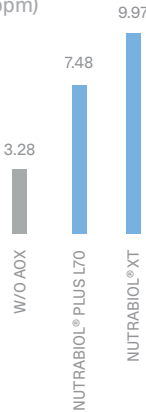
Rancimat Test at 110°C  
Soybean Oil + AOX (1000ppm)

Rancimat Hours



Rancimat Test at 80°C  
Fish Oil+ AOX (1000ppm)

Rancimat Hours





# Natural protection, better nutrition

A concentrate rich in Natural Tocopherols from Non-GMO vegetable oil. Nutrabiol® T is a natural antioxidant, ideal for protecting nutritional supplements and dietary products, very effective at low concentrations and with no effects on the color or smell of the final product.

- 100% Natural Antioxidant
- European Quality
- No organoleptic effects
- Organic Compliant
- Non-GMO Project Verified

## How does Nutrabiol® T work?

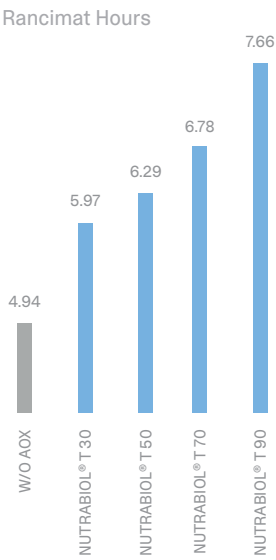
Nutrabiol® T is a powerful natural antioxidant that is highly effective in increasing the shelf life of nutritional supplements. Nutrabiol® T products are recommended for use in fats and oils and in applications requiring a 100% natural antioxidant.

## Why Nutrabiol® T?

Nutrabiol® T offers high antioxidant activity, with European quality, non-GMO certification and a clean label.

Nutrabiol® T is available in both soy and sunflower based formulations, in concentrations up to 90% and 70%, respectively.

Rancimat Test at 110°C  
Sunflower Oil + AOX  
(1000ppm)



# Active Ingredients



Main Active Ingredients Applications

BTSA has been a leading supplier of high quality natural active ingredients for the food industry since 1994, making us the ideal partner for the enrichment and fortification of products.

We specialize in the manufacture of **natural vitamin E derived from non-genetically modified vegetable oil (Non-GMO)**, offering a superior alternative to synthetic vitamin E thanks to its double bioavailability.

Active Ingredients

Soft gels  
Dietary  
Nutritional Supplements  
Multivitamin Complex  
Sports Nutrition

# Healthy, natural solutions

Nutrabiol® E is Natural Vitamin E (D-Alpha Tocopherol), derived from Non-GMO vegetable oil. This active ingredient is commonly used to enrich nutritional supplements. Nutrabiol® E is available in different concentrations, from 1000 to 1300 international units, as well as in ester form for products requiring greater stability (Acetate) or powder applications (Succinate).

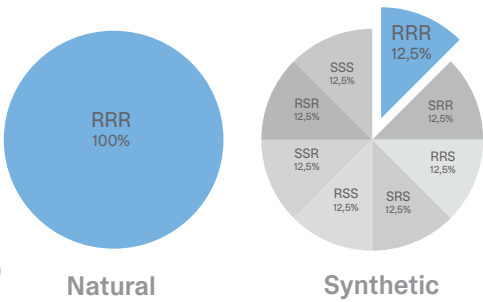
- Enriches / strengthens food supplements
- Protects cell membranes and strengthens the immune system
- Reduces the risk of heart and brain diseases
- Improves vision
- Possibility for the product to bear the “Source of Vitamin E” claim
- Non-GMO Project Verified

Natural Vitamin E (d-alpha tocopherol) is the best alternative to synthetic Vitamin E due to its higher bio-availability and healthier-for-you marketing opportunities “NATURAL VITAMIN E”

## Natural vs Synthetic

Natural Vitamin E is a single stereoisomer (called “RRR”) while synthetic Vitamin E is a mixture of 8 different stereoisomers, where only one of them is the same as the natural one.

After the absorption of Vitamin E, the transport protein  $\alpha$ -TTP, which is present in the liver, prioritizes the recognition of the natural form over synthetic. Due to this, natural Vitamin E is retained better and for a longer time in the body than synthetic Vitamin E.

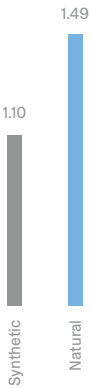


## Why Nutrabiol® E?

Nutrabiol® E is BTSA’s Natural Vitamin E (d-alpha tocopherol), which is available in different concentrations, from 500 to 1.300 International Units, as well as in ester form for products that require greater stability (Acetate and Succinate)

Natural Vitamin E exhibits superior biological activity compared to its synthetic version, resulting in better absorption into human tissue and greater retention in the body. Twice as much of the synthetic form must be ingested to match the activity of natural Vitamin E. For this reason, Nutrabiol® E is positioned as the ideal choice to enrich nutraceutical formulations, offering superior effectiveness and optimizing benefits in health and wellness products.

35% more Bio-Available  
Vitamin E Bio-Availability  
1mg  $\alpha$ -Tocopherol



## European Quality Natural Vitamin E

Nutrabiol® E is used to fortify and enrich food, adding value and following the growing trend of functional foods.

## FDA Claims

Claim	Quantity
“High” / “Rich In” / “Excellent Source Of”. Contains 20% or more of the Recommended Daily Intake (15 mg)	3.0mg/RACC*
“Good Source” / “Contains” / “Provides”. Contains 10-19% of the Recommended Daily Intake (15 mg)	1.5mg/RACC*

\* Reference Amounts Customarily Consumed

## EU Claims

Claim	Quantity
“High content of Vitamin E”	≥ 3.6 mg / 100 g
“Source of Vitamin E”	≥ 1.8 mg / 100 g

\* Indicated values correspond to non-liquid products



# Quality Commitment

BTSA's commitment to the highest quality standards is supported by the most trusted international certificate bodies.



**CARAFE**

- 1 kg
- 2.5 kg
- 5 kg
- 10 kg



**BUCKET**

- 2.5 kg
- 5 kg



**DRUM**

- 190 kg



**BAG**

- 1 kg
- 2.5 kg
- 5 kg

Packaging

**PRODUCT**

- USDA Organic
- EU Organic
- Non-GMO Project
- Halal
- RSPO

**COMPANY**

- B-Corp
- Ecovadis
- ISO 9001
- ISO 22000
- FSSC 22000

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