# Gunaminoformula

FOOD SUPPLEMENT

SPECIFIC AMINO ACID COMPOSITION FOR THE HUMAN BODY IN DIETOLOGY AND CLINICAL NUTRITION



## Gunaminoformula - Characteristics

Gunaminoformula is a food supplement with the 8 essential amino acids (3 branched-chain amino acids + 5 non-branched-chain amino acids) in a qualitative-quantitative ratio, specifically designed for human nutrition.

# The amino acids of Gunaminoformula are obtained by plant (cereals) biofermentation, ultrapurified and crystallized.

Thanks to this feature, Gunaminoformula:

- is quickly absorbed
- requires minimal digestive effort
- does not overload the kidney and the liver function
- produces only a minimum quantity of nitrogenous waste
- provides highly bioavailable essential amino acids in a minimum weight and volume

### Self-limiting metabolism<sup>1-2-3-4-5</sup>

The 8 essential amino acids must be administered simultaneously and in a precise qualitative-quantitative ratio for the efficiency of protein synthesis.

Any intracellular deficit of one or more amino acids limits the use of the other amino acids, thus reducing the rate of protein synthesis.



## Biological Value<sup>6-7-8-9-10-11</sup>

The biological value identifies the **"nobility"** of a protein, that is, the nutritional capacity of a protein food or of an amino acid combination. This value is defined as the ratio between retained and absorbed nitrogen in the body.



# Gunaminoformula in dietetics

From a dietary point of view, **Gunaminoformula** strengthens the lean mass with a minimum caloric intake and makes it possible to:

- rebalance your diet by limiting calorie intake
- facilitate the use of fat stores
- not to deplete lean body mass



# **Gunamino**formula

Promotes the **maintenance of body weight homeostasis** because it:

- Helps body weight control
- Protects lean mass
- Promotes tissue firming





# Gunaminoformula - Dietary Program

The duration of the Dietary Program with **Gunaminoformula** varies according to the needs of each person. It is recommeded to follow a period of at least 2 weeks of the **Gunaminoformula** Dietary Program, in association with an appropriate physical activity.



The product is not a substitute for a varied diet. It must be used within an adequate low-calorie diet, a healthy lifestyle and moderate physical activity. If your diet lasts longer than three weeks, please ask your doctor for advice.

# Sport and calories

This table\* shows the approximate number of calories per hour consumed according to different sports. During the dietary program with **Gunaminoformula**, a healthy and constant sports activity is recommended. The optimization of the energy and metabolic balance is accelerated, in fact, by calories consumption through sports activity.



\* Table modified from "MC Hardle W. D. et al: Physiology applied to sport: energy-nutritional aspects and performance - Ambrosiana Publishing House 2002; 25-27.

# 8 Essential amino acids in Clinical Nutrition

In terms of Clinical Nutrition, **Gunaminoformula** has a privileged position as a complementary nutritional support. It is useful, in fact, in the presence of various risk factors leading to pathological conditions related to deficiencies or increased nutritional needs, especially of amino acids and proteins.

The special characteristics of **Gunaminoformula** guarantee:

- reduced digestive effort and quick intestinal absorption
- minimum production of nitrogenous waste, without overloading the kidney and liver function
- **reduction in catabolic processes** and support of protein heritage (hormones, cytokines, neuropeptides, but also of muscle and bone mass)
- high protein synthesis, with a general benefits on patients' vitality.



## Gunaminoformula - Fields of use

### • AGING<sup>12</sup>

The special qualitative-quantitative ratio of the essential amino acids of **Gunaminoformula** ensures a highly digestible and compliant protein intake for the elderly. It is able to help maintaining the tissue plasticity and to counteract an accelerated protein catabolism as well as hormone and immune decline, typical of aging.

### • ANAEMIA<sup>13-14-15</sup>

The use of **Gunaminoformula** supports the protein structure of the heme group of haemoglobin.

### INTESTINAL INFLAMMATORY DISEASES<sup>16</sup>

The administration of **Gunaminoformula**, associated to a specific diet, helps reduce immunogenic food intake.

### • MALNUTRITION<sup>17-18-19-20</sup>

The special quali-quantitative ratio of the essential amino acids of **Gunaminoformula** helps the physiological process of muscle catabolism.

We recommend its assumption also in cases of inadequate amino acid and protein intake.

### POST-TRAUMATIC AND/OR POST-SURGICAL REHABILITATION<sup>21-22-23-24</sup>

The benefits of a supplementation with essential amino acids in association with rehabilitation therapy are well known. Thanks to the qualitative and quantitative ratio of its 8 essential amino acids, **Gunaminoformula** helps the physiological process of muscle mass recovery.

### MALABSORPTION SYNDROME<sup>25</sup>

The 8 essential amino acids of **Gunaminoformula** help amino acid intake.

### METABOLIC SYNDROME<sup>26-27-28-29-30</sup>

Gunaminoformula promotes the protein metabolism to increase the lean mass weight.

## Gunaminoformula - Suggested combinations

## **Gunamino**formula + **Omega**formula

Overweight and cholesterol levels control.

# **Gunamino**formula + **Colostro**noni

Overweight and intestinal mucosa balance.





The information herein contained concern the ingredients of **Gunaminoformula** and should not be interpreted as medical advice, nor can they replace any medical prescription. Food supplements are not intended as means for treating, preventing, diagnosing or mitigating any disease or abnormal condition.

## Gunaminoformula - Ingredients

### Nutrition facts SACHETS

#### per sachet per 100 g 1649 kJ 107 kJ Energy 388 kcal 25 kcal Fat 0.40 a 0.03 a of which saturates 0 a 0 a Carbohvdrate 16.23 a 1.05 a of which sugars 1.37 q 0.09 q Protein 0 q 0 q Salt 0.01 q 0 q L-Leucine 15.4 g 1000 mg L-Valine 12.3 g 800 mg L-Isoleucine 11.5 g 750 mg L-Lysine 10.8 q 700 mg L-Phenylalanine 10.0 q 650 mg L-Threonine 8.5 q 550 mg L-Methionine 5.4 q 350 mg L-Tryptophan 3.1 g 200 mg

#### TABLETS

	per 100 g		per 5 tablets	
Energy	1676 395	kJ kcal	85 20	kJ konl
Fat	0.07	q	0	q
of which saturates	0	g	0	g
Carbohydrate	0	g	0	g
of which sugars	0	g	0	g
Protein	0	g	0	g
Salt	0.01	g	0	g
L-Leucine	19.70	g	1000	mg
L-Valine	15.76	g	800	mg
L-Isoleucine	14.78	g	750	mg
L-Lysine	13.79	g	700	mg
L-Phenylalanine	12.81	g	650	mg
L-Threonine	10.84	g	550	mg
L-Methionine	6.90	g	350	mg
L-Tryptophan	3.94	g	200	mg

## Ingredients

### SACHETS

Mix of essential amino acids (L-Leucine, L-Valine, L-Isoleucine, L-Lysine hydrochloride, L-Phenylalanine, L-Threonine, L-Methionine, L-Tryptophan), maltodextrin, acidity regulator: citric acid; flavorings, emulsifier: sucrose esters of fatty acids; sweetener: sucralose.

- with sweetener -

## Instructions for use

### SACHETS

We recommend the assumption of 1 sachet daily. Dissolve the content of the sachet in a glass (200 ml) of water, fruit juice or other drink and stir well.

## Packaging

### SACHETS

24 x 6.5 g sachets - Net weight 156 g - with sweetener -

### TABLETS

Mix of essential amino acids (L-Leucine, L-Valine, L-Isoleucine, L-Lysine hydrochloride, L-Phenylalanine, L-Threonine, L-Methionine, L-Tryptophan), coating agent: hydroxy-propyl-methylcellulose, colour: calcium carbonate; bulking agent: microcrystalline cellulose (cellulose gel); anti-caking agent: stearic acid.

### TABLETS

We recommended the assumption of 5 tablets per day, unless otherwise indicated.

### TABLETS

50 x 1.015 g tablets - Net weight 50.75 g

## Instruction for use

- Dietetics: see dietary program with Gunaminoformula.
- Nutrition: 5 tablets or 1 sachet daily, depending on the patient's general health conditions.

## Warnings

Store the product in a cool and dry place and protect from light. The expiry date refers to a product correctly stored in its original and undamaged packaging. Food supplements should not be used as a substitute for a varied diet and a healthy lifestyle. Do not exceed the stated recommended daily dose. Keep out of the reach of young children. Do not use in children and pregnant women, or for long-term use without consulting your doctor.

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GUNA S.p.A. is a company with quality management standard system **ISO 9001** certified by Bureau Veritas Italia S.p.A



Guna S.p.a. has joined Lifegate's Zero® Impact project To offset its plant's CO<sub>2</sub> emissions by contributing to the development of energy efficiency and forest protection initiatives.