

New



GUNAMINO

F O R M U L A

**Ideal and balanced combination
of essential amino acids for
human nutrition**



Characteristics of Gunamino Formula



GUNAMINO FORMULA is a food supplement with the **8 essential amino acids**. These are contained in a special and ideal quantitative and qualitative ratio, especially formulated for the human species.



The **AMINO ACIDS** of Gunamino Formula are extracted from **plants** through a fermentation process, and they are ultra purified and crystallized.



THE **UNIQUENESS** of the amino acid cocktail of Gunamino Formula lies in a special ratio between the 8 essential amino acids, the only ratio capable of ensuring their full absorption and their optimal utilization through the **anabolic pathway**.



The **CLINICAL SAFETY** of Gunamino Formula is guaranteed by its amino acid profile, due to which only a small percentage of amino acids follow the catabolic pathway. This is the reason why Gunamino Formula:

- is **absorbed in few minutes** without overloading the digestive system
- does not produce **nitrogenous waste** and does not overload the **kidneys** or the **liver**
- provides the **highest protein value compared to any other food**, in a lower weight and volume

SELF-LIMITING METABOLISM

To make sure that optimal protein syntheses take place, the 8 essential amino acids must be administered at the same time and in one precise and single qualitative and quantitative ratio. Any intracellular deficit of one or more than one amino acids hinders the use of the other amino acids, thus reducing the rate of protein synthesis



A special balance between the amino acids of Gunamino Formula, specific for the human body, implies the fact that these do not undergo the process of **deamination**, which occurs when even only one of the amino acids is not supplied in a balanced quantitative ratio compared to the others.



Other amino acid combinations

Prevailing anabolism

- Optimal protein synthesis
- Minimum residual nitrogen
- No kidney overload
- Minimum calorie intake

Prevailing catabolism

- Energy production
- Transformation and accumulation of amino acids in the form of fat or glycogen
- Production of nitrogenous waste

Characteristics of **Gunamino Formula**

BIOLOGICAL VALUE

Sign that a proteins is “**noble**”. This value is used to measure the nutritional capacity of a protein food or of an amino acid combination. This value is defined as the ratio between nitrogen retained in the body and nitrogen absorbed by the body.

$$B.V. = \frac{\text{food } N - (\text{Faeces } N - \text{metab } N) - (\text{urine } N - \text{endog } N)}{\text{food } N - (\text{Faeces } N - \text{metab } N)}$$

*B.V. = Biological Value
Food N = Nitrogen in food
Faeces N = Nitrogen in faeces
Urine N = Nitrogen in urine
Metab N = Metabolic Nitrogen
Endog N = Endogenous Nitrogen*

RANKING OF PROTEIN BIOLOGICAL VALUES



Gunamino Formula



Eggs



Fish



Lean meat



Cow milk



Brown rice



White rice



Soy beans



Wheat germ



Peanuts



Dried beans



Potatoes



Gunamino Formula in **DIETETICS**

Gunamino Formula offers special opportunities in **DIETETICS**. It helps reducing the fat body mass and “nourishes” the lean body mass at the same time by **giving a minimum calorie intake**.

The requirement to obtain weight loss (that is to turn the energy balance negative) is perfectly satisfied by Gunamino Formula, which allows to lower the calorie diet regime. This forces the body to use the **fat body mass** as energy source. Nevertheless, this prevents the body from depleting the lean body mass, because the lean body mass is fully nourished by the amino acids of the special mix of this product.

LOSE WEIGHT with Gunamino Formula WITHOUT WASTING AWAY

Fat body mass reduction

Tissue firming

Control of hunger

Protection of lean body mass

No yo-yo dieting



Gunamino Formula

DIETARY Program

The duration of the **Dietary Program with Gunamino Formula** varies according to the needs of each person.

A period of **2 weeks** at least is recommended within the **Dietary Program, with Gunamino Formula** in combination with a daily physical activity.

Breakfast

5 tablets or 1 sachet of **Gunamino Formula**
 You can choose among: herbal teas, infusions, barley, tea, coffee

500 g of fresh fruit
 (excluding bananas)



Snack in the morning

1 juice or
 1 fresh fruit smoothie



Lunch

200-250 g of fish
 or white meat

500-700 g of fresh fruit
 or vegetables
 (moderate use of olive oil and salt)



Dinner

5 tablets or 1 sachet
 of **Gunamino Formula**

500-700 g of fresh fruit
 or, preferably, vegetables
 (moderate use of olive oil and salt)



SPORT and CALORIES

This table shows the number of calories consumed per hour according to different sports. During the *Dietary Program with Gunamino Formula*, a healthy and constant sports activity is recommended. The energy balance turns negative more rapidly when consuming many calories through sports activity.

SPORT	kcal/h
 Jogging	900
 Marathon	700
 Skiing	500
 Squash	500
 Hard fitness	500
 Tennis	440
 Strong fitness	400
 Body building	400
 Aerobics	400
 Soccer	400
 Dancing	350
 Swimming (400 m/h)	300
 Easy fitness	250
 Golf	250
 Bicycle (10 km)	210

Remarks: the *Dietary Program with Gunamino Formula* should be intended as indicative, as it should be individualized according to a patient's needs and characteristics and to her/his clinical history. Under strict medical supervision it is also possible to replace 2 or all the 3 main meals.

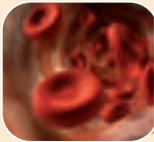
Gunamino Formula

CLINICAL NUTRITION

In the field of **Clinical Nutrition** Gunamino Formula has a privileged position in **primary prevention** and in the complementary treatment of many diseases, especially the chronic and degenerative ones.

The special characteristics of Gunamino Formula offer optimal nutritional conditions in chronic or debilitated patients. This product guarantees:

- optimal and rapid **absorption in the digestive system** (almost no digestive involvement);
- reduced production of **nitrogenous waste** (without any kidney overload);
- reduction in **catabolic processes**, reduction of protein depletion (hormones, cytokines, neuropeptides, but also of muscle and bone mass);
- maximization of **protein synthesis** (general benefits on patients' vitality).



Anemia

The use of Gunamino Formula ensures an appropriate support to the protein structure of the heme group of hemoglobin.



Inflammatory Bowel Disease

The use of Gunamino Formula ensures a dietary control resulting in reduction or elimination of immunogenic food *intake*.



Malnutrition

Gunamino Formula allows an optimal protein synthesis, which counteracts the muscle catabolism. All this helps maximize body mass, strength and endurance. It is recommended in cases of prolonged malnutrition or in temporary conditions (lack of appetite or inability to eat due to illness).



Body growth of the fetus below normal standard

Gunamino Formula provides an optimal amino acid intake in a period (development of the fetus) of increased anabolic needs.



Metabolic syndrome

The *Dietary Program based on Gunamino Formula* helps reduce the body weight as well as control the risk factor "abdominal obesity".



Chronic renal failure

Since Gunamino Formula produces a minimum amount of nitrogen waste, it does not overload the renal function, and thus it improves the patient's nutritional conditions.



Ageing

Gunamino Formula provides the elderly an adequate protein intake capable of keeping the tissues elastic and counteracting an increased protein catabolism and *hormonal immune decline*, which are typical of ageing.

Gunamino Formula

HOW TO USE IT

GUNAMINO FORMULA: HOW TO USE IT

- **Tablets:** swallow the tablets with a little amount of water.
- **Sachet:** dissolve the content of one sachet in a glass of water (200 ml) or fruit juice or any other drink, and stir well.

GUNAMINO FORMULA: INSTRUCTIONS FOR USE

- **Dietetics:** see *Dietary Program with Gunamino Formula*
- **Clinical nutrition:** 5-10 tablets or 1-2 sachets daily. Depending on the patient's general health conditions, the dosage may even reach 15-20 tablets or 3-4 sachets.



GUNAMINO FORMULA: ASSOCIATIONS

GUNAMINO FORMULA

+

OMEGA FORMULA™



Metabolic syndrome

GUNAMINO FORMULA

+

Ferroguna



Anemia with low hemoglobin values

GUNAMINO FORMULA

+

VIT FORMULA™



Malnutrition with vitamin deficiencies

GUNAMINO FORMULA

+

Colostro Noni



Inflammatory Bowel Disease



Key words:

Ideal nutritional association of the **8 essential amino acids**.

Fields of application

Gunamino Formula is an ideal and well-balanced combination of **essential amino acids** indicated in cases of reduced intake or increased needs of these nutrients.

Ingredients

- **Tablets:** L-Leucine, L-Valine, L-Isoleucine, L-Lysine hydrochloride, L-Phenylalanine, L-Threonine, L-Methionine, L-Tryptophan, coating agents: hydroxypropyl methyl cellulose, shellac, E472; bulking agent: microcrystalline cellulose; colouring agent: E171.
- **Sachets:** mix of essential amino acids (77%) (L-Leucine, L-Valine, L-Isoleucine, L-Lysine hydrochloride, L-Phenylalanine, L-Threonine, L-Methionine, L-Tryptophan), maltodextrin, acidity regulator: citric acid; flavouring, emulsifier: sucrose esters of fatty acids; sweetener: sucralose.

Warnings

Keep the product in cool and dry place, and protected from direct sunlight. The expiry date refers to a product correctly stored in its original and undamaged packaging. This product should be used as part of a varied and balanced diet and a healthy lifestyle. Do not exceed the RDA. Not suitable for pregnant women and children. Do not use for prolonged periods of time without consulting a doctor.

NUTRITION FACTS

	per sachet	per 5 tablets
Energy	25 kcal 107 kJ	20 kcal 85 KJ
Protein (N X 6.25)	0.00 g	0.00 g
Carbohydrate	1.05 g	0.00 g
Fat	0.03 g	0.00 g
L-Leucine	1000 mg	1000 mg
L-Valine	800 mg	800 mg
L-Isoleucine	750 mg	750 mg
L-Lysine	700 mg	700 mg
L-Phenylalanine	650 mg	650 mg
L-Threonine	550 mg	550 mg
L-Methionine	350 mg	350 mg
L-Tryptophan	200 mg	200 mg

Packaging

- Pack of 24 and 42 x 6.5 g sachets
- Pack of 50 and 150 x 1.01 g tablets

References

1. Mc Ardle W.D. et Al.
"Fisiologia applicata allo sport: aspetti energetico, nutrizionale e performance" Casa editrice Ambrosiana 2002: 25-27.
2. "Sport e consumo calorico"
ISCC - Istituto Cardiovascolare Camogli 2011-2015.
3. Lehninger A. L.
"Biochimica" Zanichelli Editore, II Edizione.



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