

Q: *What is SON FORMULA®?*

A: SON FORMULA® is a patented (U.S. Patent 5,132,113), 100% natural dietary supplement that provides a unique pattern of essential amino acids, in a highly purified, free, crystalline form. SON FORMULA® is recommended as a dietary supplement in conjunction with the required amounts of vitamins, minerals, trace elements, essential fatty acids (EFA), and energy sources, in the dietary management of those individuals with inadequate protein intake or absorption due to physiological, psychological, or social-economic causes.

Q: *How was SON FORMULA® discovered?*

A: The discovery of the SON Formula® is the result of 23 years of research by the International Nutrition Research Center (INRC), a leading research institution in the field of human nutrition.

Q: *Does SON FORMULA® comply with the U.S. Food and Drugs Administration (FDA) labeling regulations?*

A: Yes, SON FORMULA® complies with the FDA's labeling regulations. SON FORMULA® does not require the Food and Drug Administration (FDA) approval because it is a dietary supplement. Dietary supplements, in contrast to drugs, do not require the FDA approval but must comply with the FDA's labeling regulations.

SON FORMULA® CHARACTERISTICS

Q: *What is composition of SON FORMULA®?*

A: SON FORMULA®, in a dose of 10 gram (g), provides the following essential amino acids profile:

L - Isoleucine	1.483 g	L - Leucine	1.964 g
L - Valine	1.657 g	L - Lysine	1.429 g
L - Methionine	0.599 g	L - Phenylalanine	1.289 g
L - Threonine	1.111 g	L - Tryptophan	0.368 g

Q: *Is SON FORMULA® a natural or a synthetic product?*

Why is SON FORMULA® a natural product?

A: SON FORMULA® is a 100% natural product. SON FORMULA® is a natural product because it is made of natural amino acids that are extracted (isolated) from dietary proteins.

Q: *What are amino acids?*

A: Amino acids are the constituents of dietary proteins.

Q: *What are Essential Amino Acids?*

A: Essential Amino Acids are nutrients that are indispensable for human life because they cannot be synthesized within the human body and, therefore, must be supplied through the diet to meet daily requirements.

Q: *How many amino acids are considered to be essential for human nutrition?*

A: According to the World Health Organization (WHO) and to The U.S. National Academy of Sciences (NAS), eight amino acids are considered to be essential for human nutrition. This has been also confirmed by clinical studies performed by INRC. SON FORMULA® contains the eight essential amino acids.

Q: *Are Amino Acids natural or synthetic?*

A: Amino Acids are natural because they are extracted (isolated) from dietary proteins.

Q: *Are amino acids animal or vegetal?*

A: Amino acids cannot be classified as either animal or vegetal. They are, simply, natural compounds.

Q: *What kinds of proteins are used to produce amino acids?*

A: Either vegetable or animal dietary proteins can be utilized to extract amino acids.

Q: *Why is the Net Nitrogen Utilization (NNU) of SON FORMULA® unique?*

Why does SON FORMULA® provide the highest nutritional value?

Why does SON FORMULA® help maximize protein synthesis?

Why does SON FORMULA® help the strength, endurance and volume of muscles?

Why does SON FORMULA® help minimize the recovery period of muscles?

Why does SON FORMULA® help optimize athletic performance?

Why is SON FORMULA® recommended in the dietary management of those individuals who are unable to synthesis adequate protein due to insufficient protein intake or absorption, or to increased body protein metabolism?

Why does SON FORMULA® strengthen and firm body tissues (e.g. skin, muscles)?

A: The unique amino acid profile of SON FORMULA® provides a 99% Net Nitrogen Utilization (NNU), which means that 99% of its constituent amino acids act as precursors (“building blocks”) of body protein synthesis. This 99% value is the highest NNU of any dietary protein or amino acid formula. Until now, whole hen egg protein was considered to be the dietary protein with the highest biological value. Whole hen egg protein provides only a 48% NNU, which still is 51 percentage points less than that provided by SON FORMULA®. Hence, *the use of SON FORMULA® is recommended in the dietary management of those individuals: a) with inadequate protein intake or absorption due to physiological, psychological, or social-economic causes, b) who want to maximize their body’s protein synthesis, to maximize muscle strength, endurance and volume, and at the same time, minimize the recovery period after training.*

Q: *It has been said that SON FORMULA® maximizes muscle strength, endurance and volume. Is that true for everybody?*

A: Yes. No matter if you are a beginner or an Olympic champion, or if you are 15 or 70 years old, you are always going to experience increasing positive results in terms of your muscle strength, endurance and volume. The results will vary, of course, according to your age, health status, and the intensity and frequency of your workouts.

Q: *What does the Net Nitrogen Utilization (NNU) of protein mean?*

A: A protein’s NNU represents its nutritional value, namely, the percentage of its constituent amino acids that act as precursors (“building blocks”) in the body’s protein synthesis.

Q: *Why is SON FORMULA®'s NNU health-preserving?*

Why does SON FORMULA® release the lowest amount of nitrogen catabolites?

A: SON FORMULA® is, currently, the most health preserving dietary protein or amino acid formula because SON FORMULA® releases only 1% nitrogen catabolites (metabolic waste). Thus, by consuming SON FORMULA® in substitution of dietary proteins, a 52% to 84% of unwanted nitrogen catabolites can be avoided. *As a result, the use of SON FORMULA® is especially recommended in the dietary management of individuals with:*

- *Renal failure who must avoid nitrogen catabolites*.*
- *Hepatic failure who must avoid nitrogen catabolites.*
- *Diabetes I, Diabetes II, or Gestational Diabetes who must avoid unwanted glucose production, resulting from dietary protein catabolism.*

**Those individual with impaired renal or hepatic function must consult their physician to obtain their proper dosage of SON FORMULA®.*

Q: *Why does SON FORMULA® release the lowest amount of energy (calories)?*

It has been said that SON FORMULA® maximizes muscle strength, endurance and volume and, at the same time, decreases body fat. How does SON FORMULA® work?

Can athletes taking SON FORMULA® reduce fat body mass and at the same time increase lean body mass?

Why does SON FORMULA® help maximize weight loss?

Why is SON FORMULA® recommended in the dietary management of individuals who are undergoing low-calorie and very-low-calorie diets?

By taking SON FORMULA® can one gain, regain, or retain an adequate lean body mass, while decreasing fat body mass?

Can SON FORMULA® be recommended to both overweight and underweight individuals?

A: Yes. Due to its high NNU, 0.35 oz. (10 g) of SON FORMULA® releases less than ½ a calorie (0.4 Kcal.) while providing a body's protein synthesis equivalent to that from 25 g of high biological value protein. *As a result, SON FORMULA® is recommended in the dietary management of those individuals who need to gain, regain, or retain the adequate lean body mass while controlling their fat body mass.*

SON FORMULA® provides virtually no energy (calories). This unique characteristic of SON FORMULA® helps increase muscle strength, endurance and volume, while helping to decrease body fat.

SON FORMULA® is recommended as a dietary supplement in low-calorie diets to avoid the common problems of low-calorie diets, such as lack of strength and decreased firmness of skin, muscles or other body tissues.

Q: *How long does it take to digest SON FORMULA®?*

What does it mean that SON FORMULA® is "pre-digested"?

What are the advantages of SON FORMULA® being "pre-digested"?

Why does SON FORMULA® minimize the intensity and duration of digestive functions?

Why is the fact that SON FORMULA® is "pre-digested" advantageous for an athlete?

A: Since SON FORMULA® is "predigested", it can be easily absorbed in the small intestine within 23 minutes from its intake. This is far less time than the three or four hours necessary to digest dietary proteins. SON FORMULA®, acting as a completely catabolized dietary protein, induces a minimal stimulation of intestinal secretions. The amino acids in SON Formula® are absorbed without the aid of peptidases (enzymes). *By using SON FORMULA® the overloading of digestive functions can be avoided. For this reason, the use of SON FORMULA® is especially recommended in the dietary management of those individuals with gastrointestinal disorders or who have had a gastrectomy.*

By using SON FORMULA® in substitution of dietary proteins, up to 7 hours per day of digestive functions can be economized; therefore, faster and more effective body protein synthesis can be achieved.

Q: *Is SON FORMULA® better absorbed in tablet or powder form?*

A: SON FORMULA® can be easily absorbed in either tablets or powder form. However, for those individuals who had their stomach removed (gastrectomy), or who suffer gastrointestinal disorders, SON FORMULA® tablets should be ground into a powder.

Q: What is the fat content in SON FORMULA®?

Is SON FORMULA® recommended in the dietary management of those individuals for whom dietary saturated, monounsaturated, or polyunsaturated fatty acids (fat) ingestion must be controlled?

Is SON FORMULA® recommended in the dietary management of those individuals who suffer high blood cholesterol?

A: SON FORMULA® is 100% fat free. When restricted, unwanted fat can be avoided by using SON FORMULA® in substitution of dietary proteins. *The use of SON FORMULA® is recommended in substitution of dietary proteins for those individuals with dietary intake restrictions of saturated, monounsaturated, or polyunsaturated fatty acids (fat).*

Q: What is the sodium content in SON FORMULA®?

Is SON FORMULA® recommended in the dietary management of those individuals with dietary intake restrictions of sodium?

A: SON FORMULA® is 100% sodium free. When restricted, unwanted sodium can be avoided by using SON FORMULA®. By using SON FORMULA® in substitution of common dietary proteins, 100% of undesirable sodium may be avoided. This is an effective exclusive health-preserving characteristic of SON FORMULA®. *As a result, SON FORMULA® is recommended in the dietary management for those individuals with dietary intake restrictions of sodium.*

Q: Does SON FORMULA® act as a base or an acid?

Is SON FORMULA® recommended for those individuals who suffer gastritis?

A: SON FORMULA® is *amphoteric*, which means it can act either as an acid or a base in accordance with the pH of the surrounding medium. *As a result:*

- *SON FORMULA® is recommended in the dietary management of those individuals with gastritis.*
- *SON FORMULA® is capable of balancing any abnormal pH.*

Q: Does SON FORMULA® create fecal residue?

Could the use of SON FORMULA® as a non-residue dietetic supplement be advantageous?

A: SON FORMULA®, in contrast to dietary proteins, does not produce fecal residue. *For this reason, the use of SON FORMULA® is especially recommended in dietary management during pre-surgery and post-surgery periods. It is recommended in the dietary management of those patients who suffer from intractable diarrhea or from impaired digestion and/or absorption secondary to gastrointestinal disorders. However, SON FORMULA® is not contraindicated for those with constipation.*

Q: Does SON FORMULA® cause any adverse reactions?

A: SON FORMULA® is a dietary supplement and not a medicine. The use of SON FORMULA® does not have any contraindication and, so far, no side effects have ever been reported. As a result, everyone who is not able to meet their daily protein requirement can safely use SON FORMULA®, regardless of age, gender or health status.

Q: What is the recommended daily dosage of SON FORMULA® if consumed as a supplement of dietary proteins? May SON FORMULA® be taken with or without food?

A: Suggested use: 3 to 5 tablets a day (or as directed by a health professional), to be swallowed with water or any other suitable beverage during a meal (breakfast, lunch or dinner).

Q: Can SON FORMULA® be taken at any age?

A: Yes, SON FORMULA® can be taken at the recommended doses at any age.

Q: *Does SON FORMULA® have any contraindications when taken in conjunction with medications?*

A: No contraindications have been, so far, reported. However, before taking SON FORMULA® or other dietary supplements consult your physician.

Q: *May other dietary supplements be taken in conjunction with SON FORMULA®?*

Can an athlete reduce the amount of dietary supplements by taking SON FORMULA®, and if so, why?

A: Dietary supplements commonly use as a protein source casein, whey, or soybean, which provide an average of 17% NNU, which is 82 percentage points less than that provided by SON FORMULA®. Therefore, one or two tablets of SON FORMULA® can provide the body's protein synthesis equivalent to that provided by 8 liquid ounces of any available dietary supplement. Hence, the use of any protein supplement in conjunction with SON FORMULA® is not recommended.

To repeat: Those substituting low NNU dietary supplements with SON FORMULA® can improve their nutritional status and avoid kidney or liver stress.

Q: *Is it necessary to take vitamins, minerals and trace elements in conjunction with SON FORMULA®?*

A: A daily supplement of vitamins, minerals, and trace elements is recommended. *An adequate formula of vitamins, minerals and trace elements, should be taken in conjunction with SON FORMULA®.*

Q: *How long is SON FORMULA®'s shelf's life?*

A: SON FORMULA®'s shelf's life is two years.

Q: *Does SON FORMULA® need to be refrigerated?*

A: SON FORMULA® does not need to be refrigerated; however, it should be kept in a dry place.

Q: *Can SON FORMULA® be altered with high temperatures?*

A: Only extremely high temperatures (above 280 degrees Celsius) can alter the nutritional value SON FORMULA®. (Normal cooking/baking/boiling temperatures will not alter the nutritional value of SON Formula®.)

Q: *Why is SON FORMULA® different from any dietary protein or other amino acid formula?*

A:

- Only SON FORMULA®, due to its 99% NNU, can provide, in ten tablets (10g), the body's protein synthesis ("building blocks") equivalent to that provided by 25g of high biological value protein.
- Only SON FORMULA®, due to its 99% NNU, releases, 1% nitrogen catabolites (metabolic waste), namely, the lowest value released by any dietary protein or amino acid formula. By comparison: dietary proteins release between 52% and 84% of nitrogen catabolites, which is between 51 and 83 percentage points more than that released by SON FORMULA®.
- Only SON FORMULA® can be absorbed within 23 minutes from its intake. This is far less time than the three or four hours necessary to digest dietary proteins.
- Only SON FORMULA® can provide, in ten tablets (10g), the body's protein synthesis ("building blocks") equivalent to that provided by 25g of high biological value protein while releasing less than half a calorie (0.4 Kcal).

Q: *For which specific nutritional disorders is SON FORMULA® recommended?*

A: SON FORMULA®, as a dietary supplement, is recommended in the dietary management of those individuals who are undergoing nutritional disorders, such as obesity, anorexia, and malnutrition.

SON Formula®™ is specially recommended in the dietary management of individuals with:

- gastrointestinal disorders
- cardiovascular disease
- musculoskeletal problems
- increased fat-body mass
- decreased lean-body mass
- osteoporosis
- diabetes
- anemia
- malnutrition
- hormone imbalance
- immune impairment
- high blood pressure
- high cholesterol
- food sensitivities
- kidney / liver failure
- cachexia
- alcohol dependency
- drug dependency

THE USE OF SON FORMULA® DURING PHYSICAL ACTIVITY

Q: *For athletes what are the specific advantages of using SON Formula®?*

A: SON Formula® can help:

- maximize the synthesis of protein;
- maximize the strength, endurance and volume of muscles;
- minimize the intensity and duration of digestive functions;
- minimize the muscle recovery period after workouts..

Q: *How long do you have to use SON FORMULA® to see positive results?*

A: You may feel positive results the very first time you use SON FORMULA® and you may be able to see and confirm results the first week. By experiencing, week after week, an increase in muscle strength, endurance and volume, you will realize that this dramatic improvement is not the result of a “psychological effect” but has indeed been caused by a natural physiological effect.

SON FORMULA® AND WEIGHT MANAGEMENT

Q: *Can SON FORMULA® be used in conjunction with a weight management program?*

A: Yes. The use of SON FORMULA® as a dietary supplement during a low-calorie diet is highly effective in maximizing weight loss. A ten gram dose of SON FORMULA® provides the body’s protein synthesis equivalent to that of 25g of high biological value protein while releasing only ½ a calorie of energy. As a result, by taking SON FORMULA® during a weight-loss diet, one may avoid hunger, maximize weight loss, strengthen and firm body tissues such as skin and muscle.

Q: *Why is SON FORMULA® recommended during low-calorie diets?*

A: SON Formula® can help:

- maximize weight loss;
- strengthen and firm body tissues (i.e. skin, muscle);
- avoid those anomalies commonly associated with weight-loss diets such as hunger, weakness, hypoglycemia, headache by ketosis, or decreased libido can also occur.
- avoid regaining weight (yo-yo effect).

Q: *Can a reduction of lean body mass tissue or a lack of firmness in the skin tissue be corrected by taking SON FORMULA®?*

A: Yes. Inadequate nutrition leads to negative nitrogen balance and, therefore, to decreased body protein synthesis. This decreased protein synthesis causes a reduction of lean body mass and lack of firmness in the skin tissue. *As a result, SON FORMULA® is recommended in the dietary management of those who have reduced lean body mass or a lack of firmness in skin tissue.*

Q: *Why does SON FORMULA® help to avoid hunger?*

A: Because of its extremely high NNU, 0.35 oz. (10g) of SON FORMULA® provides an approximate nutritional protein value equivalent to 25g of high biological value protein. As a result, SON FORMULA® is recommended, as a dietary supplement during low-calorie diets.

Q: *Why does SON FORMULA® prevent the regaining of lost weight (yo-yo effect) after low-calorie diets?*

A: Low calorie diets are associated with a decreased protein intake that causes a negative nitrogen balance, which leads to loss of lean tissue and, of course, to weight reduction. After the conclusion of the low-calorie diet, if an adequate protein intake is reestablished, independently of the energy intake, there is a recovery of the lean tissue lost during the diet and, of course, a regaining of the lost weight. *By taking SON FORMULA® as a dietary supplement during low-calorie diets, the loss of lean tissue can be prevented and, therefore, also the regaining of lost weight. The yo-yo effect can be avoided.*

THE USE OF SON FORMULA® DURING THE AGING PROCESS

Q: *Is it possible, by taking SON FORMULA® to slow or reverse some of the effects associated with the aging process?*

A: It is well known that, so far, the normal aging process cannot be prevented or halted. However, the life threatening effects of malnutrition, such as immunodeficiency, anemia, decreased lean body mass, and increased fat body mass that are commonly associated with the aging process, can be truly reversed or minimized by taking SON FORMULA®.

Q: *Are individuals with impaired renal and hepatic functions allowed to take SON FORMULA®?*

A: Yes. SON FORMULA® is recommended in substitution of dietary proteins for those who have impaired renal or hepatic functions. However, patients with impaired renal or hepatic functions must consult their physician about their required SON FORMULA® dosage.

Q: *Are individuals with chronic or acute diarrhea allowed to take SON FORMULA®?*

A: Yes. Because, of its extremely high NNU, SON FORMULA® is essentially a no-residue food supplement. *As a result, SON FORMULA® is recommended for those with acute or chronic diarrhea. However, SON FORMULA® is not contraindicated for those individuals who have constipation.*

Q: *Why is malnutrition so common among the elderly?*

A: Some causes of malnutrition among the elderly:

- **A decreased sense of taste and smell**, which can cause malnutrition by reducing appetite.
- **Dental problems**, which can cause malnutrition by decreasing eating capability.
- **Infectious diseases**, which can cause malnutrition as a result of increased body protein catabolism (breakdown) and other metabolic alterations.
- **Chronic degenerative diseases**, which can cause malnutrition as a result of increased body protein catabolism (breakdown) and other metabolic alterations.
- **Gastrointestinal disorders** such as decreased gastrointestinal secretion or intestinal absorption, or functional gastrointestinal obstruction. These disorders can cause malnutrition by limiting the absorption of nutrients.

Gastrointestinal disorders can also cause discomfort during digestion. Thus, with an intent to avoid such discomfort, (mainly during the evening), individuals may reduced food intake, causing malnutrition.

- **Neuropsychiatric factors such as depression**, which can cause anorexia and consequently malnutrition;
- **Social factors such as poverty**, which can cause malnutrition as a result of inadequate food intake.

Q: *What life-threatening effects of malnutrition commonly associated with the aging process can be truly reversed or minimized by taking SON FORMULA®?*

A: It is well known that, so far, normal aging process cannot be prevented or halted. However, the following life- threatening effects of malnutrition commonly associated with the aging process can be truly reversed or minimized:

- **Immune impairment.** Malnutrition is associated with immune impairment, which increases susceptibility to infectious diseases. Infectious diseases, in turn, can cause or aggravate even a previously moderate state of malnutrition as a result of many metabolic alterations.
- **Anemia.** Malnutrition is associated with anemia due to deficient erythropoiesis such as: Iron-Deficiency Anemia, Protein Depletion Anemia, Vitamin B₁₂ Deficiency Anemia, Folic Acid Deficiency Anemia, Vitamin C Deficiency Anemia, and Copper Deficiency Anemia. Anemia is common among the elderly. It is estimated that more than 35% of the elderly population experiences anemia. Among the most common symptoms of anemia can be found shortness of breath and fatigue.
- **Decreased lean body mass.** Malnutrition is associated with a decreased lean body mass. As previously described, lean body mass is the living-cells mass that includes muscles, organs, skeleton, antibodies, enzymes, etc. When lean body mass decreases, one result is that body movements, including breathing, can be seriously limited.
- **Increased fat body mass.** Obesity is the most common form of malnutrition in the USA. As previously described, during the third age (50-75 years), body fat mass increases up to 100%. This can cause or aggravate health disorders such as cardiovascular diseases, hypertension, shortness of breath, fatigue, or orthopedic afflictions.

Q: *Why has the achievement of an adequate nutrition in the elderly been, until now, a scientific dilemma?*

A: The achievement of an adequate nutrition in the elderly has been, until now a scientific dilemma. One of the major obstacles to accomplishing this purpose has been the fact that during the aging process, renal activity decreases significantly. As a result, an average 70-year old man retains only 30% of his juvenile renal activity. Therefore, even though, on one hand, the adequate daily protein intake is required, on the other hand, it may be contraindicated. This is due to the fact, that the required protein intake if associated with a decreased renal activity can provoke a life-threatening increase of nitrogen metabolites (wastes) such as Blood Urea Nitrogen (B.U.N.). *As a result, SON FORMULA® is recommended in the dietary management of the elderly, principally in those who have impaired renal function or impaired hepatic function.*

SON FORMULA® DOSAGE

Q: *What is the recommended dosage of SON FORMULA® for an athlete to get dramatic positive results in the shortest time?*

A: Even though each individual is different according to his/her age, nutritional status, and of course, to the intensity and frequency of physical activity, the recommended dosage is, as follows:

For the beginner:

- Take, 30 minutes before training, 5 to 10 tablets of SON FORMULA® as a dietary supplement in conjunction with the required vitamins, minerals and trace elements.

For the professional:

- Take, 30 minutes before training, 10 tablets of SON FORMULA® as a dietary supplement in conjunction with the required vitamins, minerals and trace elements.
- After training take, 10 tablets of SON FORMULA® as a dietary supplement, in conjunction with the required amount of vitamins, minerals and trace elements. (see Physical Activity sheet.)

- Q:** *What is the recommended daily dosage of SON FORMULA® if consumed as a supplement of dietary proteins during a weight-loss diet?*
- A:** **Take 8 to 10 tablets as a substitute for lunch or dinner**, in conjunction with the required vitamins, mineral and trace elements and with approximately 1 lb. (450g) of any fresh fruit, excluding bananas (due to the sodium content of bananas).