



AMINO-THER®

**Rebuild with enriched
essential amino acids**



Good nutrition is crucial to leading a healthy lifestyle. Combined with physical activity, a patient's diet can help them reach and maintain a healthy weight, reduce their risk of chronic diseases, and promote overall health.

Nutritional deficiencies can lead to a variety of health problems, including lowered immunity, longer recovery from illness, digestive problems and **sarcopenia**.

Sarcopenia

Sarcopenia is a progressive loss of muscle mass, which increases the risk of injury and disability. It is especially common in older adults and patients who are unwell.

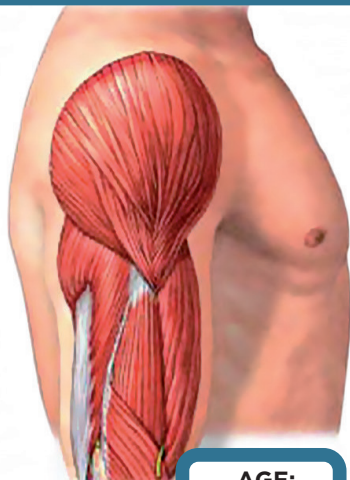
Several studies indicate that protein intake decreases in elderly people with frailty, and that even healthy older adults may need more protein than what was recommended by dietary recommended intakes (DRI) for the elderly. Studies in elderly subjects receiving nutritional intervention with food supplements or high-protein diets demonstrated that this intervention could increase muscle mass and strength.¹ An alternative could be the long-term use of **essential amino acid (EAA) supplementation**.



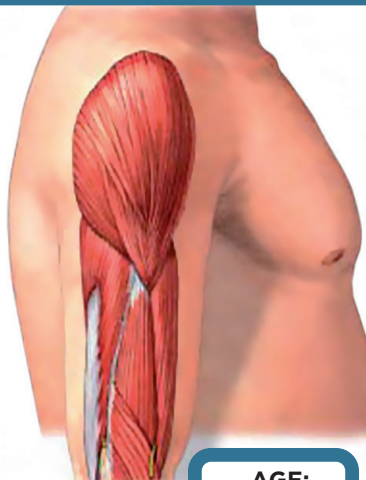
Decrease in
muscle fibres

Invasion
by fat cells

Atrophy

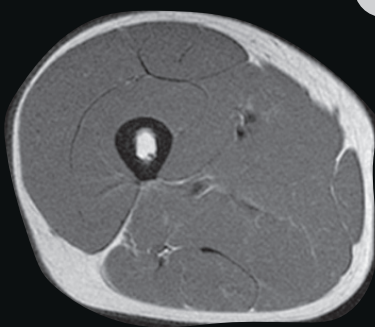


AGE:
25 years

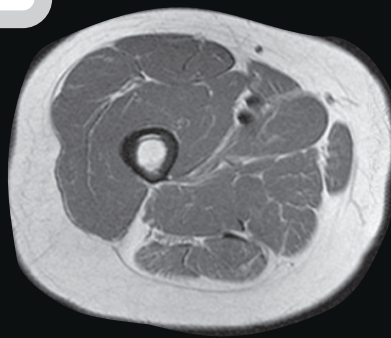


AGE:
65 years

MRI:
right thigh



invasion
by fat
cells



Introducing Amino-Ther

Operating since 1996, Professional Dietetics (PD) was one of the first companies worldwide to work on identifying specific amino acid mixtures for energy metabolism disorders in humans. The focus on R&D allowed improvements in compositions and identifying new bio-chemical processes (including the addition of three intermediates of the Krebs cycle) to enhance mixture efficiency.

Amino-Ther is a Food for Special Medical Purposes (FSMP). It comprises a patent-pending nutritional blend, made up of a cluster of amino acids and three organic acid intermediates of the Krebs cycle: **malic acid, succinic acid and citric acid**, crucial for protein synthesis. Amino-Ther's precise stoichiometric ratio of amino acids and three organic acids is able to act as a mitochondrial metabolism modulator, enhancing mitochondrial energy production and aiding protein metabolism.²

Amino-Ther is indicated for the dietary management of protein malnutrition in acute or chronic diseases, accompanied by loss of muscle mass and in senile or neoplastic sarcopenia. It can be administered orally with Amino-Ther, or both orally and enterally with Amino-Ther PRO.

In addition, Amino-Ther is:



Rapidly absorbed

For immediate release and action



Doesn't affect satiety

Light, with a small serving size



Tropical & citrus flavours

Mild, pleasant flavours to ensure easy and effortless consumption



EAAs vs Proteins

- In healthy elderly people, the need for proteins is approximately **1g/kg of bodyweight** per day
 - In the ill elderly, this need is increased to approximately **1.5g/kg of bodyweight** per day
- 1.5g/kg daily protein intake may be difficult to achieve in ill elderly people. Furthermore, EAAs can't be produced endogenously and must be supplemented.

Free EAAs

Rapidly absorbed

100% bio-available

Precise composition to ensure protein synthesis

Appetite is maintained

PROTEINS

Must be metabolised

Only partially bio-available

Contain non-essential amino acids, not useful for protein synthesis

Appetite is impaired

Why Amino-Ther?

The body is unable to synthesise essential amino acids, and largely depends on their external supply.³

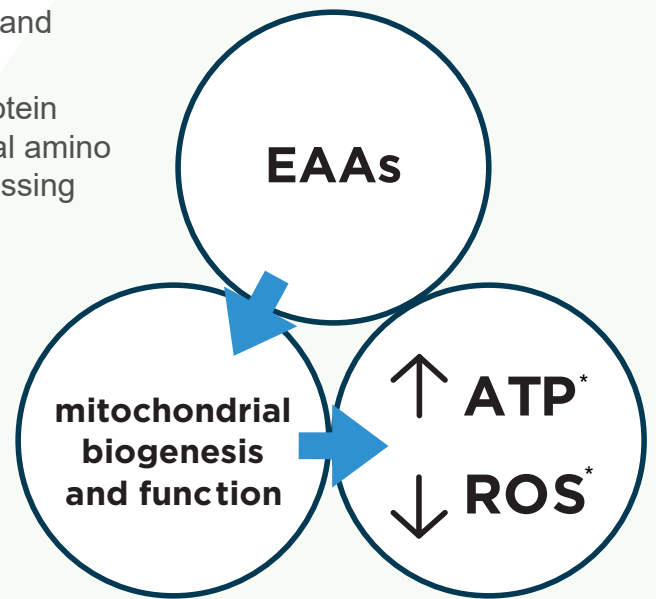
The lack of just one essential amino acid slows down protein synthesis. In addition, in the absence of a single essential amino acid, autologous proteins are degraded to provide the missing amino acid, **promoting catabolism**.³

Under physiological conditions, protein equilibrium is ensured by the balance between protein synthesis and catabolism.³

The nutritional intervention with Amino-Ther's precise mixture of amino acids and three organic acids, is capable of enhancing protein metabolism and the energy metabolism of cells - processes that are intimately connected.

Specifically it:

- Improves skeletal muscle protein metabolism
- Counteracts muscle mass loss
- Increases the synthesis of plasma proteins
- Contributes to the maintenance and function of immune cells



EAA supplementation has also shown to:

Assist with the prevention and management of sarcopenia⁴

EAA's represent an effective solution to provide energy for anabolic response. Long term EAA supplementation may help to prevent and manage sarcopenia.

Assist with protein malnutrition in sarcopenia and frailty⁴

As well as not affecting the appetite in people with frailty and sarcopenia.

Aid in long-term dietary supplementation and management

Including for those with cognitive decline, microbiota (the usual micro-organisms found in the gut that assist with normal functioning) and gut dysbiosis (an imbalance in the normal gut microbes that is associated with disease).



Clinical Outcomes of Mitochondrial Function with EAA Supplementation⁵

155 elderly malnourished patients were randomised into 2 groups, with EAA and placebo supplementation respectively, and followed for two months.

Results showed that those supplemented with EAAs experienced:



Improved nutritional status and general health



Increased immune cell efficiency



Improved cognitive performance

Amino-Ther Indications

Amino-Ther (Tropical Flavour)



30 x 5.9 g sachets
Net weight: 177 g

Indicated for use via oral route.

Directions:

Pour the contents of 1 sachet into a glass and add 120-150 mL of still water at room temperature. Mix thoroughly until fully dispersed. Consume immediately after prepared.

Recommended dose:

1-2 sachets per day or as required, as far away from meals as possible, to facilitate absorption according to medical opinion.

Amino-Ther PRO (Citrus Flavour)



30 x 5.85 g sachets
Net weight: 175.5 g
Osmolarity: 255 mOsm/kg

Indicated for use via oral or enteral routes.

Directions:

Via oral route: as for Amino-Ther.

Via enteral route: do not combine Amino-Ther PRO with other formulas for enteral nutrition in the same bag. Wash the tube with 30 mL of water before administering the product. Ensure that the enteral tube is in the correct position before use. Pour the contents of one sachet of Amino-Ther PRO into a suitable container and disperse in 150 mL of water at room temperature or slightly warm. Mix until the product is completely dispersed. Administer the solution using a syringe measuring at least 60 mL.

On completion of the administration, wash the enteral tube with another 30 mL of water. Preferably use immediately after preparation, within 4 hours if kept at room temperature or within 24 hours if kept in the refrigerator.

Recommended dose:

1-2 sachets per day or as required.

Amino-Ther Nutritional Information

Amino-Ther & Amino-Ther PRO	
Servings per Pack: 30 Serving Size: 1 Sachet	
Quantity per sachet	
Energy	97.35kJ
Protein	0g
Fat, total - Saturated	0g 0g
Carbohydrates - Sugars	2.1g 0.023g
Sodium	67mg

1 sachet	
mg	
L-Leucine	1200
L-Lysine	900
L-Threonine	700
L-Isoleucine	600
L-Valine	600
L-Cystine	150
L-Histidine	150
L-Phenylalanine	100
L-Methionine	50
L-Tryptophan	50
Vit.B6	0.85 (60.7% NRV) [†]
Vit.B1	0.70 (63.6% NRV) [†]
Citric acid	409
Succinic acid	102.5
Malic acid	102.5

* Amino-Ther and Amino-Ther PRO differ in their excipients
[†] Nutrient Reference Value.

AMSL Medical are proud to partner with Professional Dietetics, who share our commitment to positively impacting the lives of patients. Professional Dietetics continued innovation has led to 20 years of continuous success, resulting in:

**Over 50
European &
international
patents**

**Over 85
medical
products of
class II & III**

**Over 100
scientific papers
published in
prestigious
scientific
journals**

**7 patented
Foods for
Special Medical
Purposes and 12
in the process of
being registered**

For more information on Amino-Ther, please contact us on **(02) 9882 3666**
or at **orders@amsl.com.au**

amsl.com.au

References: 1. Fujita S., Volpi E., J Nutr, 2006. 2. International patent request PCT/IB2018/055425. 3. Wilson D.C., Am. J. Nutr., 2000. 4. Fujita S., Volpi E., J Nutr, 2006 Jan;136 (1 Suppl):277S-80S. 5. Buondonno et al., Clin Nutr. 2019. pii: S0261-5614(19)33085-7. PR-100-427 June 2021

