# Protein from Beef Bone Broth

Code FE2293 - 300 gramms



Our **Protein from Beef Bone Broth** is made in the traditional way over a low heat. It is obtained from the bones and connective tissues of free-grazing, pasture fed cattle.

Bone broth has a high protein content and is a rich source of amino acids. With a natural protein content of 99%, it is a highly bioavailable source of protein that provides the essential amino acids your body needs, in proportions that stimulate your metabolism and the cell renewal process.

Our **Protein from Beef Bone Broth** is laboratory tested to ISO 17025 ensuring it is free of antibiotics, Bovine Spongiform Encephalopathy (BSE) and hormones. Ideal for increasing the protein value of soups, stews or sauces, it can also be used on its own as a ready-to-drink broth.

**Ingredients:** Beef bone broth (from Swedish grass-fed beef (*Bos taurus*)) powder, lecithin (from sunflower (*Helianthus annuus*)).

Nutritional information:	Per serving 10 g	Per 100 g
Energy (kJ/kcal)	178/42	1 783/420
Fats	0,3 g	2,7 g
Saturates	0,1 g	0,9 g
Mono-unsaturates	0,1 g	1,1 g
Polyunsaturates	0,1 g	0,5 g
Carbohydrate	0 g	0 g
Sugars	0 g	0 g
Fibre	0 g	0 g
Protein	9,9 g	99,2 g
Salt	0,2 g	1,7 g

Typical amino acid profile per serving (10 g)**	
Glycine	2,000 g
Proline	1,200 g
Glutamic acid.	1,100 g
Hidroxyproline	1,020 g
Alanine	0,880 g
Arginine	0,750 g
Aspartic acid	0,600 g
Lysine*	0,380 g
Leucine*	0,370 g
Serine	0,340 g
Valine*	0,300 g
Phenylalanine*	0,230 g
Threonine*	0,210 g
Isoleucine*	0,170 g
Tyrosine	0,130 g
Hystidine*	0,110 g
Methionine*	0,090 g
Tryptophan*	0,036 g
Cysteine+cystine	<0,010 g

\* Essential amino acid

\*\* Average analysis

### Size and format:

300 g.

### Recommended daily dose:

1 tablespoon (10 g) daily.

Do not exceed the stated recommended daily dose.

#### Indications and uses:

- Osteoarticular health: it is a rich source of phosphorus, magnesium, calcium, glucosamine and collagen.
- Nutritional contribution to diet.
- Anti-ageing care: its high collagen and hyaluronic acid content helps maintain healthy skin.
- It helps maintain good intestinal health during the recovery from intestinal permeability problems.
- After aerobic and strength training it is an excellent way to boost the muscle repair and growth process.

#### **DETAILS:**

Our **Protein from Beef Bone Broth** is traditionally cooked over a low heat, maximising the release of proteins, minerals and vitamins that serve to benefit every aspect of your health. It is obtained from the bones and connective tissues of free-range, pasture-fed cattle.

With a natural protein content of over 90%, it is a highly bioavailable source of protein that provides the essential amino acids your body needs, in proportions that stimulate your metabolism and the cell renewal process.

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This product has been tested in an ISO 17025 accredited laboratory and is free from antibiotics, bovine spongiform encephalopathy (BSE) and hormones.

#### **INGREDIENTS:**

BONE BROTH: the consumption of bone broth soups during periods of illness and convalescence has a long tradition. Only a small number of studies have attempted to discover more about their properties in these processes, so the research is preliminary and the answers appear to be somewhat elusive to date. Bone broth is known to contain the following compounds:

- Gelatine, a substance containing collagen peptides.
- Glycosaminoglycans (GAGs) such as glucosamine, hyaluronic acid and chondroitin sulphate.
- Amino acids such as proline, glutamine, arginine and glycine.
- Minerals such as calcium, magnesium, phosphorus and potassium.

One study analysed the actual mineral content of bone broth and concluded that the mineral content is actually quite low <sup>(1)</sup>. While critics have used this to suggest that there is no benefit to consuming bone broth, others have suggested alternative explanations. First, it has been suggested that the nutritional value of bone broth may come from the high bioavailability of the nutrients. Secondly, the benefits may be due to a combination of the other components described above. Animal data suggest that bone broth is associated with anti-inflammatory and pain-reducing effects <sup>(2)</sup>.

Gelatine is a component of the broth that is rich in collagen and is responsible for its congealing when cooled. According to the Weston A. Price Foundation, gelatine was traditionally used in France to aid digestion and treat muscular diseases, and was even added to baby food <sup>(3)</sup>. Collagen and other broth ingredients, including glycosaminoglycans (GAGs) and amino acids, are important components of the extracellular matrix and help form skin, cartilage, muscle and bone <sup>(4)</sup>.

Collagen supplementation has been shown to benefit muscle repair and slow sarcopenia, aiding joint health, pain reduction and skin quality by reducing wrinkles (5-7).

The glutamine and collagen it provides help maintain good intestinal health by helping to restore intestinal permeability and are helpful in a weight control diet <sup>(8)</sup>. Its mineral and amino acid content supports the immune system <sup>(9)</sup>.

Its low caloric value compared to its nutritional profile can be helpful in convalescence and in diets for elderly people who have difficulty metabolising proteins.

#### References:

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- 3) Weston A. Price Foundation. Broth is beautiful. https://www.westonaprice.org/health-topics/food-features/broth-is-beautiful/
- 4) Mouw, Janna K., Guanqing Ou, and Valerie M. Weaver. "Extracellular matrix assembly: a multiscale deconstruction." Nature reviews Molecular cell biology 15.12 (2014): 771.
- 5) McAlindon, T. E., et al. "Change in knee osteoarthritis cartilage detected by delayed gadolinium enhanced magnetic resonance imaging following treatment with collagen hydrolysate: a pilot randomized controlled trial." Osteoarthritis and Cartilage 19.4 (2011): 399-405.
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- 7) Zdzieblik, Denise, et al. "Collagen peptide supplementation in combination with resistance training improves body composition and increases muscle strength in elderly sarcopenic men: a randomised controlled trial." British Journal of Nutrition 114.8 (2015): 1237-1245.
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