

Maca

120 vegetable capsules / Code FE1835



Maca contains 750 mg of maca root per capsule. Maca (*Lepidium meyenii*) is a plant that has been cultivated for over 2000 years and grows at altitudes of over 4000 metres in the Central Andes of Peru. This plant is distinguished by its underground part, the hypocotyl and the root, which constitutes the primary and secondary metabolites storage organ. The primary metabolites make up the plant's nutritional content, supplying a large amount of **protein, fibre, minerals** (calcium, iron, copper and zinc, among others), **vitamins B1, B2 and B3, 20 amino acids and 20 free fatty acids**. The secondary metabolites include sterols and a high content of unique alkaloids (glucosinolates) called macaenes and macamides.

HEALTH CLAIMS (EU Regulation 432/2012): *Maca is a source of energy that supports both physical and mental performance, while also helping to maintain optimal levels of stamina and vitality.*



Vegan. Ovo-lactovegetarian. Gluten free. Dairy free.

FORMAT: 120 vegetable capsules

FORMULA

Ingredients: Maca root (*Lepidium meyenii*), vegetable capsule (glazing agent: hydroxypropylmethylcellulose, humectant: purified water).

Nutritional information:

	4 capsules
Maca (<i>Lepidium meyenii</i>)	3.000 mg

Cautions:

Consult a health-care practitioner prior to use if you are pregnant or breast-feeding, if you are being treated with medication (antidepressants, anticoagulants) or if you have a special medical condition (high blood pressure, anxiety, depression).

Recommended daily dose:

2 capsules twice daily. Do not exceed the stated recommended daily dose.

Indications and uses:

- Erectile dysfunction, sperm production and motility.
- Memory and cognitive impairment.
- Depression and anxiety.
- Performance and fatigue.
- Ageing.
- Metabolic syndrome.

DETAILS:

Maca (*Lepidium meyenii*) is a plant that has been cultivated for over 2000 years and grows exclusively in the Central Andes of Peru. Up to thirteen varieties have been described, characterised by the colour of the hypocotyls, ranging from white to black, with different biological properties. For centuries, the most common and most widely used ecotype has been the yellow variant, which is used in this product. Traditionally used as a food supplement due to its high nutritional content, it has now been shown to have various effects upon sexual function, spermatogenesis, memory, depression and anxiety, as an energiser, and against benign prostatic hyperplasia. In addition, maca lowers glucose levels, and its consumption is associated with lower blood pressure and improved metabolic syndrome health status scores.

INGREDIENTS:

MACA: is a biennial herbaceous plant of the *Brassicaceae* family, cultivated for over 2000 years, which grows at an altitude of over 4000 metres in the Central Andes of Peru, in an area characterised by rocky terrain and intense sunshine, strong winds and sub-zero temperatures.

This plant is distinguished by the underground part, the hypocotyl and the root, which constitutes the storage organ for primary and secondary metabolites. The primary metabolites make up the plant's nutritional content, providing a large amount of protein, fibre, minerals (calcium, iron, copper and zinc, among others), vitamins B1, B2 and B3 and 20 amino acids and 20 free fatty acids. Secondary metabolites include sterols, alkaloids, glucosinolates, macaenes and macamides, with the latter having been defined as chemical markers of maca's biological activity. These are compounds that act on the hypothalamus and adrenal glands, regulating hormone levels and producing an energy and virility-enhancing effect.

Several studies have shown that the colours of maca are associated with variations in concentrations of different bioactive metabolites, with each variety providing different biological effects. There are thirteen different ecotypes, with yellow being the most common and most widely cultivated variant in the Central Andes region ⁽¹⁾.

Maca is widely reputed to be an aphrodisiac for men and women, and it is said to improve erectile function and increase libido ^(2,3). Yellow maca improves daily sperm production and also increases sperm motility ⁽⁴⁾. There is clear evidence to suggest that consuming yellow maca increases sperm volume, sperm count and sperm motility. It also increases the number of motile sperm without affecting the luteinising hormone (LH), follicle stimulating hormone (FSH), prolactin, oestradiol and testosterone levels ^(5,6).

Yellow maca also helps with cognitive function by improving memory and facilitating learning processes ^(7,8). Other studies have confirmed that due to its high B-vitamin content, yellow maca reduces oxidative brain damage (lipoperoxidation) and depression and anxiety scores, even in postmenopausal women ^(9,10).

Administration of the yellow ecotype results in improved physical endurance, which is measured in terms of time to fatigue, due to the increase in cellular oxygenation ⁽¹¹⁾. Different studies have confirmed the performance-enhancing effect of maca as an energiser among athletes ^(12,13,14).

With regards to metabolism, yellow maca lowers glycaemia, increases insulin levels, improves lipid profile and increases glucose tolerance ^(14,15).

Villagers who traditionally consume maca have lower systolic blood pressure levels than those who do not ⁽¹⁶⁾. Maca also contains high amounts of potassium, which is an important nutrient to reduce the risk of hypertension. As a primary metabolite it may be useful in patients with hypertension.

Many studies have confirmed maca's antioxidant power, associating it with better health and anti-ageing scores ⁽³⁾.

Many *in vitro* studies have indicated its safe usage, given that consuming the dry extract of the plant does not cause hepatotoxicity, and no side effects have been recorded in the results of *in vivo* studies, considering that maca has been used for centuries in the Central Andes of Peru ⁽¹⁷⁾.

References:

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