

Maca Is Good for More Than Your Mojo

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STORY AT-A-GLANCE

- › Ancient Peruvians used maca root in both food and medicinal capacities, perhaps most notably to increase fertility, heighten sexual function and boost mood
- › The antioxidants, vitamins, 20 amino acids and as many fatty acids in maca help balance hormones, boost memory and focus, relieve menopausal symptoms and ease stress
- › Maca has been shown to preserve bone mineral density, increase strength and endurance and possibly reduce men's prostate cancer risk
- › Ground into a powder, 1 to 3 tablespoons of maca can be sprinkled into smoothies or trail mix

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Superfoods seem to be more abundant than they've ever been. One of the best, but lesser known, is an ancient root vegetable called maca, belonging to the same cruciferous family as kale and cauliflower. However, maca is most closely associated with mustard, turnip, cabbage, garden cress and [watercress](#).¹

Grown in the Peruvian mountains, maca's history is long and distinguished, as it was used even earlier than the Incans for both food and traditional medicine. Its most notable use was to [proliferate fertility in both men and women](#) and, serendipitously, increase sexual desire. That may be why another name for it is Peruvian ginseng.²

In modern times, maca is taking on new life with clinically proven and remarkable health benefits, both as a food and supplement. Studies showed it helped **improve mood** and memory, lower stress levels, treat osteoporosis, protect against UV radiation,³ help balance hormones⁴ and perform a dozen other functions.

Similar to turnip, maca root (*Lepidium meyenii*) is the world's highest-growing cultivated crop, still flourishing in the rocky soil, high winds, intense sunlight and widely fluctuating temperatures of the Andes Mountains, at altitudes at or above 13,000 feet. Rain Tree, a tropical plant database, notes certain basics of the maca root:

"It is rich in sugars, protein, starches, and essential nutrients (especially iodine and iron). The tuber or root is consumed fresh or dried. The fresh roots are considered a treat and are baked or roasted in ashes (in the same manner as sweet potatoes).

*The dried roots are stored and, later, boiled in water or milk to make a porridge. They also are made into a popular sweet, fragrant, fermented drink called maca chicha. In Peru even maca jam, pudding and sodas are popular. The tuberous roots have a tangy, sweet taste and an aroma similar to that of butterscotch."*⁵

Maca roots are still grown, harvested, sun-dried and ground down to powder form. Its "earthy, nutty" essence is often sprinkled in such dishes as oatmeal, smoothies and trail mix. A good place to start might be 1 tablespoon daily, working up to 3 per day for maximum benefits.

More on Maca: Nutritional Aspects and Health Benefits

There are several phytonutrients in maca,⁶ including more than 20 amino acids, eight of them essential, as well as minerals, vitamins, fiber and 20 **"good" fatty acids**, such as oleic acid. **Vitamins B1, B2, C and E** are plentiful, plus maca has more calcium than milk, and a copper level similar to that found in lentils.

In terms of the Reference Daily Intake (RDI) percentages maca offers for daily intake, Authority Nutrition⁷ notes that just 1 ounce (28 grams) provides:

Vitamin C — 133% RDI

Copper — 85% RDI

Iron — 23% RDI

Potassium — 16% RDI

Vitamin B6 — 15% RDI

Manganese — 10% RDI

What can all these nutritional attributes do for people who consume maca? According to Rain Tree:

"The nutritional value of dried maca root is high ... It contains 60-75 percent carbohydrates, 10-14 percent protein, 8.5 percent fiber, and 2.2 percent lipids.

The protein content of maca exists mainly in the form of polypeptides and amino acids (including significant amounts of arginine, serine, histidine, aspartic acid, glutamic acid, glycine, valine, phenylalanine, tyrosine and threonine).⁸

Maca for Your Thyroid

As a dried root, maca can be stored for as long as seven years. It can range in color from black to white and many colors in between, such as purple, orange or green. The color is significant, because the darker the root, the more iodine is present, making it a natural substance to help prevent goiters.

The Maca Team, dedicated to getting this little-known superfood "out there" for people to experience its organically grown nutritional benefits, notes that iodine is very important for [thyroid health](#). One teaspoon contains 0.025 milligrams (mg); 4 teaspoons contain 100% of the RDI. It's also important to note that maca:

"Is essential in helping the thyroid gland to produce hormones. Beyond that, iodine supports healthy metabolism, balanced moods, healthy blood pressure and may also be useful in preventing cancer.

A lack of iodine in your diet can lead to goiters, hypothyroidism, low metabolism, problems in pregnancy, depression, mood disorders, fatigue and other conditions resulting from hormonal imbalance."⁹

It should be noted that maca contains sulfur-containing glucosinolates. As a result, a side effect of eating maca in very high amounts is that it could potentially cause goiter. According to the University of Michigan Medicine:

"Glucosinolates can cause goiter (swollen thyroid gland with decreased activity) if taken in excess combined with a low-iodine diet. Though this is documented to occur with other glucosinolate-rich foods, it is not known if maca causes goiter."¹⁰

There is also some suggestion that the iodine in maca may cause goiter, but according to The Maca Team, "Based on the amount of iodine in [m]aca it is highly unlikely that taking [m]aca alone will contribute to the formation of a goiter even in people with a compromised thyroid gland."¹¹

Nutritional Benefits of Maca for Men and Women

One of the most dramatic contributions maca provides is its ability to improve libido in men,¹² but with the added benefit shown in other studies that it does so without affecting testosterone or any other sex hormone.¹³ The University of Michigan Medicine (UMM) recommends 1,500 or 3,000 mg per day for eight weeks for this purpose.

Further, this root has demonstrated increased sperm counts, sperm motility and semen volume,¹⁴ for which UMM recommended the same amount with an open-ended time frame. As an example, one study reported that, taken as a supplement, strength and endurance athletes, in this case cyclists, reported improved cycling time and, as an aside, increased sex drive.¹⁵

For older men, prostate issues may appear, and maca has been shown in animal studies to deal with two of the most troubling by reducing prostate size¹⁶ and possibly reducing men's prostate cancer risk, although more tests are needed.

Menopause, the bane of many women as middle age approaches, is often accompanied by hot flashes. Studies have shown maca to have positive effects on both of these by

balancing female hormones. Supplemental amounts suggested were 2.5 to 3 grams per day for six to 12 weeks.¹⁷

Regarding depression experienced by some women associated with menopause, one study noted that maca:

*"Reduces psychological symptoms, including anxiety and depression, and lowers measures of sexual dysfunction in postmenopausal women independent of estrogenic and androgenic activity."*¹⁸

Additional Maca Benefits

Maca is an "adaptogen," which describes a natural substance that helps your body deal with such stressors as alarm clocks, traffic jams and illness, among others.¹⁹

An animal study reported that maca extracts given over 28 weeks appeared to preserve bone mineral density compared to placebos, increase femur diameter and calcium content more than control agents and normalize bone mineral density.²⁰ Paraphrasing a Chinese study, the Maca Team²¹ noted:

*"Dietary supplementation with [m]aca may have potential effects on prevention of postmenopausal lipid abnormality and bone metabolism via a different mechanism from estrogen."*²²

Studies also indicated that **maca may make you feel more energized** and alert for a day at the office or before playing sports, with the added benefits of quick results after taking it, and no nervous "jitters" such as you might experience after drinking coffee. A study published in *Nutrients* also noted that workout performance may be improved:

"The decrease in inflammation and improvement of physical fitness in elite athletes helped their performance. These changes were observed in the requirement of ATP-PC and aerobic energy systems but more in fin swimming athletes (FSA) requiring aerobic energy systems."

*This effect is the increased antioxidant activity and influenced mitochondrial biosynthesis and associated regulatory factors due to black maca supplementation intake."*²³

Additionally, taking maca root supplements doesn't necessarily claim to help control diabetes, but a 2007 study found that after taking them for two weeks, animals fed a high-sucrose diet demonstrated "significantly improved glucose tolerance" and lowered levels of glucose in their blood.²⁴

How to Take Maca Supplements

Maca should be taken gradually at first, e.g., taking a small amount for a few days and determining how your body reacts before upping your dosages.²⁵ Because of its effects on hormone levels, physicians say people who rely on hormone-altering medications for diseases like breast or prostate cancer, high blood pressure or other serious conditions should avoid eating or taking maca; the same is advised for pregnant or nursing women.²⁶

Over time, your body can start taking the nutrients in maca for granted; in other words, they don't seem to do as much "good." Consequently, some nutritionists recommend that you take maca tablets for short periods rather than daily for months. Some suggest six weeks on and six weeks off.²⁷

As a supplement, maca studies often used 500 to 1,000 mg three times daily.²⁸ One reason maca is suggested as a supplement, according to Examine, is that "maca root does not taste nice, [and has] a very dirt-like grassy taste; capsules are generally better liked than powders for the uninitiated."²⁹ However, others say maca has a "pleasant" taste.³⁰ Superfoods like maca provide something wild, fresh and extra-nutritional that processed foods can't:

"Call them what you will, foods with high nutrient levels are going to be superfoods when compared to the depleted, over-hybridized, GMO, soil

depleted, and over farmed varieties we are all used to consuming from the common grocery and even health food store!

The problems with the modern food supply are many. One of the biggest that even traditional foodies frequently don't seem to grasp is the significant loss of both mainline nutrients – minerals, vitamins, protein and the like – from our food combined with the loss of other types of beneficial compounds and phytonutrients over the past few hundred years."³¹

Because this is true on nearly every level for nearly every food, maca represents a safe, primeval food source with nutritional attributes that supersede many others, especially in terms of the conditions it targets.

Sources and References

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