

MACA

This unusual root has been growing in high-altitude areas of South America for at least two-thousand years. Deliberately cultivated and harvested by Peruvian Incans, it was used as currency at one time. During Spanish colonization of Peru, maca was used by the Incans to pay taxes. Although known to the indigenous populations for centuries, maca is fairly new to the commercial supplement world of Western cultures, but is rapidly gaining in popularity due to its amazing healing properties. Before general commercial cultivation can be successful, maca needs to be adapted to different growing conditions. Thus far, germination of seeds is somewhat hit-and-miss in all but the high-altitude, harsh growing conditions in Peru. A variety of maca is found in Bolivia, at lower altitude and easier growing conditions, but it too, doesn't grow well in a greenhouse. From historical data, maca is known as an aphrodisiac and energizer. Recent studies done on rats demonstrate that maca can reduce prostate size. Current small studies are underway in humans but published findings are not yet available. Preliminary studies find that maca can heighten libido but does not raise actual hormone levels. Early research findings suggest that maca acts by balancing hormones. Proponents of this supplement allege that it produces energy by its action on the adrenal glands. They also report it reestablishes hormone balance in women to prevent negative symptoms of menopause such as hot flashes and mood swings. It serves as an aphrodisiac for both men and women, again by balancing hormones and lifting depression. This seems like a tall order for a cousin of the radish! Dried maca root has a nutritional profile similar to cereal grains such as rice. It is 60% carbohydrates, 10% protein, 8.5% fiber and 2.2% fats. It is high in iron, selenium, calcium and magnesium. Interestingly, selenium is being studied extensively by the Department of Veterans Affairs as a prostate cancer treatment/preventive, and maca has already been shown to shrink the prostate in rats. The Peruvians have always eaten maca cooked, but have prepared it in many different ways. Fermented, it makes a weak beer. It can also be roasted, boiled and mixed with milk as a cereal, or mashed and dried as flour. In the booming market of nutritional supplements, maca is produced most often as a powder or as a gelatin. The gelatinized version is much more potent than any other preparation. In Norway, maca is considered a medicine and cannot be used without a prescription. Maca root comes in different colors. Three in particular have been most studied and used. Black maca root is used for energy; cream is used for food because of its sweeter flavor, and red seems to be the one that reduces prostate size. Maca also comes in gold, purple and green. Each color is considered to be genetically unique. It would seem from the different actions of various colors, that this is correct.

Sources: Taylor LG (2005). *The healing power of rainforest herbs: a guide to understanding and using herbal medicinals*. Garden City Park, NY: Square One Publishers. Muhammad, I; Zhao J., Dunbar D.C. & Khan I.A. (2002). Constituents of *Lepidium meyenii* 'maca'. *Phytochemistry* 59 (1): 105-110. Downie, Andrew. On a remote path to cures. *New York Times* January 1, 2008.