



Health benefits of Fulvic acid and other Chemicals of Shilajit

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ABSTRACT

Shilajit also referred to as salajeet, moomiyo, and mumijo is blackish-brown exudates obtained from layer of rocks in many mountain ranges (especially the Himalayan ranges of the Indian subcontinent) of the world. It is used to treat many ailments since antiquity days.

It is considered to be miraculous gift of God. The shilajit extracted from rocks is not in pure form it should be purified before use with the help of latest available techniques.

KEYWORDS : Shilajit, aphrodisiac, fulvic acid, antiaging

Shilajit is found between cracks of large rocks produced by the decomposition of plant material from species such as *Euphorbia royleana* and *Trifolium repens*. This decomposition seems to occur through centuries, studies have identified that several other plant organisms may generate shilajit, such as molds as *Barbula*, *Fissidens*, *Minium*, and *Thuidium* and other species like *Asterella*, *Dumortiera*, *Marchantia*, *Pellia*, *Plagiochasma*, and *Stephenrenccella-Anthoceros*. (Agarwal, Khanna, Karmarkar, Anwer, and Khar, 2007)

After fermentation period, shilajit naturally come out of the rocks due to the sun's heat, and this is when they are harvested. They are manually scrapped from the rocks and then processed to remove impurities. The outcome is a homogeneous paste-like material in dark brown to black in color. It appears glossy with a bitter taste and bitumen-like smell.

Health benefits

Shilajit has been used for centuries by the traditional system of medicine, as a rejuvenator and as antiaging compound. It increases physical strength and promotes human health. The health benefits of shilajit have been shown to differ from region to region, depending on the place from which it was extracted.

It is used for curing many illnesses in oriental medicine in Asian countries. studies have shown that it has anti aging, anti-anxiety, (Jaiswal, and Bhattacharya, 1992), anti-inflammatory, anti-ulcerogenic activities (Goel, Banerjee, and Acharya 1990) and nootropic (enhancer of learning acquisition and memory retrieval) activities. (Ghosal, Lal, Jaiswal, and Bhattacharya, 1993)

As it contains a large number of minerals and nutrients which are essential for good overall health. It is very good antioxidant and aphrodisiac (a substance helpful in increasing men's appetite for sex), it is for these reasons that it was named as the "Indian viagra."

Shilajit promotes healthy metabolism, it also detoxifies the body, flushing out the toxins within.

Fulvic acid from shilajit is a far more superior than any other sources available. Sufficient amount of fulvic acid found in Shilajit helps fight aging. Fulvic acid helps speed up the penetration of the cell walls, which is essential in the absorption of minerals. This is the most significant (antiaging) role of Shilajit

shilajit mixed with ashwagandha has been proved to have health benefits such as including pain-relieving, anti-inflammatory, and anti-anxiety. Shilajit helps to bring out the best in ashwagandha. This combination also increases desire for sex, while in women, it can actually help regulate menstrual cycle and even improve fertility.

Ingredients of shilajit

It contains more than 85 minerals in ionic form and fulvic and humic acid. Dibenzo Alpha Pyrones, Humic Acids, trace minerals, vitamins A, B, C and P (citric), phospholipids and polyphenol complexes, terpenoids. Also, present are microelements (cobalt, nickel, copper, zinc, manganese, chrome, iron, magnesium and other). Studies have revealed that Shilajit contains calcium benzoate, which imparts anti-septic effect against microbial gastro-intestinal infection

Adverse effects of shilajit

Shilajit contains variable concentration of free radicals which increases with increasing pH of solution (Chen, Sensesi, and Schnitzer, 1977), (Biswas, and Ghosal, 1966). Free radical causes irreversible cellular damage. These free radicals must be removed by using latest available techniques which otherwise is not possible by using traditional system of medicines.

Studies have also shown the evidences of production of some lethal mycotoxins like 12,13-epoxytrichothecenes and naphtho- γ -pyrone-salong with these effects there are risks of fungal infections (Ghosal, Biswas and Chakrabarti, 1979), (Chakrabarti, and Ghosal, 1986).

CONCLUSION

Shilajit has large number of health benefits so it is considered to be panacea according to traditional system of medicines. But studies have shown that it may have free radicals which have adverse health effects, so the shilajit of the reputed brands may only be used

REFERENCES

- Agarwal, S. P., Khanna, R. Karmarkar, Anwer, M. K. and Khar, R.K. (2007) "Shilajit: a review," *Phytotherapy Research*, vol. 21, no.5, pp. 401-405. | Biswas, M. and Ghosal, S., (1966). Polymerization of N-vinylcarbazole in carbon tetrachloride, a free radical reaction. *Chem. Ind. (London)* 1717. | Chakrabarti, D.K. and Ghosal, S. (1986). Occurrence of free and conjugated 12,13-epoxytrichothecenes and zearalenone in fruits infected with *Fusarium moniliformae*. *Appl. Environ. Microbiol.* 51, 217. | Chen, Y., Sensesi, N, and Schnitzer, M. (1977). Information provided on humic substances E4/E6 ratios. *soil Sci. Soc. Am J.* 41, 352. | Ghosal, S., Lal, J., Jaiswal, A.K. and Bhattacharya, S.K., (1993) Effects of shilajit and its active constituents on learning and memory in rats. *Phytotherapy research* 7, 29. | Ghosal, S., Biswas, K. and Chakrabarti, D.K. (1979). Toxic naphtho- γ -prones from *Aspergillus niger*. *J. Agric. Food Chem.* 27, 1347. | Jaiswal, A.K. and Bhattacharya, S.K. (1992). Effects of Shilajit on memory, Anxiety and Brain Monoamines in Rats. *Ind J. of Pharmacology.* 24, 12. | R. K. Goel, R.S. Banerjee, and S.B. Acharya (1990). Antiulcerogenic and anti-inflammatory studies with shilajit, *Journal of Ethnopharmacology*, 29, 95. |