Clinical studies

Skin Transcriptome of Middle-Aged Women Supplemented With Natural Herbo-mineral Shilajit Shows Induction of Microvascular and Extracellular Matrix Mechanisms
https://www.tandfonline.com/doi/abs/10.1080/07315724.2018.1564088?journalCode=uacn20
Conclusions: This work provides maiden evidence demonstrating that oral shilajit supplementation in adult healthy women induced genes relevant to endothelial cell migration and growth of blood vessels. Shilajit supplementation improved skin microperfusion.

Accelerating effect of Shilajit on osteogenic property of adipose-derived mesenchymal stem cells (ASCs)
https://josr-online.biomedcentral.com/articles/10.1186/s13018-022-03305-z

Conclusion

Altogether, Shilajit/Alg scaffold presented a great potential for promoting and accelerating ASCs' differentiation into osteocyte lineage. Accordingly, this scaffold may provide a new strategy for bone tissue engineering and can be a good therapeutic approach for the treatment of bone defects.

***Shilajit*: A Natural Phytocomplex with Potential Procognitive Activity**
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3296184/

Conclusion

Shilajit is a potent and very safe dietary supplement, potentially able to prevent several diseases, but its main medical application now appears to come from its actions in benefit of cognition and potentially as a dietary supplement to prevent Alzheimer's disease. In essence, this is a nutraceutical product.

Clinical evaluation of purified Shilajit on testosterone levels in healthy volunteers
https://onlinelibrary.wiley.com/doi/full/10.1111/and.12482

Conclusion

The present study was conducted to evaluate the efficacy of PS for testosterone secretion and stimulation effects on normal healthy volunteers in the age group of 45–55 years. This effect was clarified by estimation of free and total testosterone on 0, 30, 60 and 90 days where the rise of these two androgenic markers was significant. Testosterone synthesis and secretion was supported by the maintenance levels of two gonadotropic hormones LH and FSH as well as elevation of testosterone precursor DHEAs.

The effects of Shilajit supplementation on fatigue-induced decreases in muscular strength and serum hydroxyproline levels
https://jissn.biomedcentral.com/articles/10.1186/s12970-019-0270-2

Conclusions

In summary, the results of the present study demonstrated that 8weeks of PrimaVie® Shilajit supplementation at 500mg·d−1 promoted the retention of muscular strength following the fatiguing protocol and decreased baseline HYP in the upper 50th percentile group. These findings were particularly associated with the stronger subjects and those with the highest pre-supplementation levels of baseline HYP. Thus, 8weeks of PrimaVie® Shilajit supplementation at 500mg·d−1 elicited favorable muscle and connective tissue adaptations.

The Effects of Shilajit on Brain Edema, Intracranial Pressure and Neurologic Outcomes following the Traumatic Brain Injury
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3758058/

Conclusion

Overall, the results of present study showed that Shilajit administration has neuroprotective effects in post-traumatic injuries through decreasing brain edema, blood-brain barrier permeability and ICP.

The Human Skeletal Muscle Transcriptome in Response to Oral Shilajit Supplementation
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4948208/

Conclusions

The current study reports for the first time that oral supplementation of a natural product to overweight/class I obese human subjects resulted in skeletal muscle adaptation through upregulation of ECM-related genes that control muscle mechanotransduction properties, elasticity, repair, and regeneration.

In vitro evaluation of the antiviral properties of Shilajit and investigation of its mechanisms of action
https://pubmed.ncbi.nlm.nih.gov/25792012/
Conclusions: The results of the present study demonstrate that Shilajit is endowed with broad, yet specific, antiviral activity in vitro and constitutes a natural source of antiviral substances.

Humic acid acts as a natural antidote of graphene by regulating nanomaterial translocation and metabolic fluxes in vivo
https://pubmed.ncbi.nlm.nih.gov/24857237/