

Traditional lipid-based longevity and immune-boosting herbal formulations are perfectly coherent with modern biocompatible nanoparticle drug delivery vehicle systems

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Abstract

Age-old Ayurvedic poly-herbal formulations processed in the carrier Ghee offer the most effective solutions to prolong youth and ward off organ dysfunction. Ghee based formulations also figure in therapeutic applications to fight neuro-degeneration and dwindling immunity. Since the arduous process of creating these formulations results in micronization of the lipid particles, they are in effect similar to the nanoliposomes and nanoemulsions in conception. Recent anatomical researches have unravelled the presence of fine lymphatic vessels in the CNS, which until now was thought to be bereft of lymphatic supply. Since the absorption pathway of lipids and other hydrophobic phytochemicals is mainly through the lacteals, the active Phyto-nutrients bypass the immediate metabolic transformation in the liver and reach the right heart directly (through the thoracic duct), thus becoming able to exert concentrated action on the cardio-pulmonary system. In their journey through the vast lymphatic network of the gut and the posterior abdominal wall, these phytochemicals can also directly impact the immune cells, including all varieties of T and B lymphocytes. Through minute intercommunicating channels, these phytonutrients can also reach the brain and exert effects there. Since the brain is almost entirely composed of lipids, and the immune cells mainly reside in a lipid-rich environment, lipid based herbal preparations offer a unique pathway to target these tissues. It is no wonder then that Ayurvedic master-pieces like Chyavanprash and Brahm-rasayans have withstood the test of time and have been used uninterruptedly in India for thousands of years. A more prominent role for these preparations is definitely mandated for the ageing population to maintain physiological and neurological well-being right up to the final call.

Biography

Sharadendu Bali is Professor of General Surgery at Ambala in India. He is a graduate (MBBS, 1988) from Christian Medical College, and post-graduate (MS, 1991) from KMC, Manipal. Keenly interested in Alternative and Complementary Medicine, he has two Herbal Confectionary Patents in his individual capacity. He has more than a score of publications in reputed journals and has run a Herbal Pharmaceutical company for few years. Having prepared Ayurvedic Ghee-based Awaleha confections for more than 25 years, he has devoted much time reflecting on the topic, and his present researches as a PhD scholar in Medical Biochemistry have fine finessed his grasp over lipid formulations.

Publications

Acevedo-Whitehouse Karina and Duffus Amanda L. J. 2009 Effects of environmental change on wildlife health *Phil. Trans. R. Soc.* B3643429–3438

Tomar, P Jawanjal - *Journal of AYUSH*, 2020 - researchgate.net

Bali, MS Utaal - *International Journal*, 2019 - academia.edu

Ayurveda Integr Med. 2016 Apr-Jun; 7(2): 124–131. Published online 2016 Jul 20



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