

Development and Evaluation of Aphrodisiac Herbal Chocolate for Mood Elevation and Wellness Enhancement"

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Abstract: *The incorporation of traditional herbal medicine into functional food systems offers a new method of improving mental well-being. This research centers on the creation and assessment of a new herbal mood-enhancing chocolate product that is supplemented with scientifically known adaptogenic and neuroactive plants. The product is rooted in a chocolate matrix of dark chocolate made with cocoa powder, milk powder, natural sweeteners, and cocoa butter, fortified with a robust herbal blend of: Maca root (Lepidium meyenii), Shatavari (Asparagus racemosus), Safed Musli (Chlorophytum borivilianum), Gokshura (Tribulus terrestris), Mucuna pruriens, Ashwagandha (Withania somnifera), Saffron (Crocus sativus), Kamraj (Bombax ceiba), and Kala Panja. They were chosen for their reported antidepressant, adaptogenic, anxiolytic, and dopaminergic effects.*

The herbal powders were homogeneously mixed with melted cocoa butter to aid in the solubilization of fat-soluble phytochemicals, and further incorporated into the chocolate mass. This process optimally extracted bioactive compounds like alkaloids, flavonoids, saponins, and L-DOPA. The formulation was thoroughly tested for organoleptic characteristics (taste, appearance, aroma, and texture), physicochemical properties (melting point, pH, moisture content, and hardness), phytochemical content (quantification of active compounds), antioxidant activity (DPPH assay), and microbial stability.

The end-product showed good sensory characteristics and stability during storage without any noticeable decline in its bioactive potential. Phytochemical evaluation was successful in detecting bioactive components like L-DOPA, flavonoids, and phenolics, while antioxidant evaluation indicated notable free radical scavenging capacity, reinforcing the product's claimed health benefits. The microbial stability of the product guaranteed its safety and shelf life, thus presenting a sound functional food.

The findings indicate that the developed herbal chocolate is not just a tasty treat but also a nutraceutical product with the potential to induce mood elevation, increase stress resilience, and induce mental clarity, and thus a highly viable addition to the emerging area of functional foods for enhancing mental health and overall well-being..

Keywords: Herbal chocolate, mood elevation, adaptogens, aphrodisiac, Mucuna pruriens, Ashwagandha, phytochemicals, functional food, antioxidant activity, nutraceutical formulation

