

A Review on Role of Polyherbal Formulation as Energy Booster in Traditional Medicine : Phytochemistry and Mechanism of Action

Mr. Pramod B. Chikkodi and Ms. Divyata Dinkar Landge

Nootan College of Pharmacy, Kavthe-Mahankal

Abstract: Polyherbal formulations have long been employed in traditional medicine systems for their synergistic therapeutic effects, particularly in enhancing energy, vitality, and overall well-being. This review explores the role of polyherbal energy boosters composed of botanicals such as *Withania somnifera* (Ashwagandha), *Cinnamomum verum* (Cinnamon), *Asparagus racemosus* (Asparagus), *Ocimum sanctum* (Tulsi), *Glycyrrhiza glabra* (Liquorice), *Emblica officinalis* (Amla), and *Mentha arvensis* (Mentha), along with sugar and salt. These herbs are rich in bioactive compounds like withanolides, polyphenols, flavonoids, and saponins, which contribute to adaptogenic, antioxidant, immunomodulatory, and metabolic regulatory effects. These formulations combine several herbs, each contributing unique phytochemical constituents that work synergistically to promote vitality, improve metabolic balance, and regulate stress response. The mechanisms of action include modulation of the hypothalamic-pituitary-adrenal (HPA) axis, enhancement of mitochondrial function, support for hematopoiesis, and restoration of electrolyte balance. By integrating traditional knowledge with modern phytochemical insights, this review highlights the potential of polyherbal energy boosters as natural alternatives for improving physical and mental stamina, with promising applications in the field of nutraceuticals and functional health products.

Keywords: Polyherbal energy booster, Traditional medicine, Adaptogens, Phytochemistry, Antioxidant activity, Herbal formulation, Nutraceuticals

Background: Traditional medicinal systems have long utilized polyherbal formulations to promote energy, resilience, and systemic balance. These formulations combine multiple botanicals to achieve synergistic therapeutic effects, offering an alternative to synthetic stimulants.

Objective: This review highlights the phytochemical composition and mechanisms of action of a traditional polyherbal formulation used as energy booster. It consists of *Withania somnifera* (Ashwagandha), *Cinnamomum verum* (Cinnamon), *Asparagus racemosus* (Asparagus), *Ocimum sanctum* (Tulsi), *Glycyrrhiza glabra* (Liquorice), *Emblica officinalis* (Amla), *Mentha arvensis* (Mentha), sugar, and salt as supportive components.

Methods: A narrative review methodology was adopted, sourcing data from scientific literature, classical Ayurvedic texts, and ethnopharmacological studies. Focus was placed on bioactive constituents, traditional usage, and evidence-based mechanisms contributing to energy enhancement.

