

‘AYURCEUTICALS’: A NEW ERA IN HEALTHCARE?

The association of nutraceuticals with traditional Ayurvedic medicine is bound to bring long lasting consumer acceptance.

India is renowned for its traditional medicinal practices, including Ayurveda, Siddha, and Unani, which are mentioned in ancient texts like the Vedas. Ayurveda, meaning "science of life," emerged between 2500 and 500 BC, focusing on a holistic approach to health. In Ayurveda, good health is defined as a state of metabolic balance, promoting a long and healthy life through diet and nutrition.

Until recently, Ayurvedic medicines and supplements were limited to a few health food stores in India and abroad. However, they have now become widely available in various retail outlets, including mainstream grocery and duty-free stores, reflecting their growing recognition.

The 21st century has seen a shift in healthcare from cure to prevention, with increasing demand for herbal medicines, supplements, and cosmetics due to their perceived safety, minimal side effects, and affordability. Herbal medicine has a rich history, with its use documented in Indian, Chinese, Egyptian, Greek, and Roman systems for around 5,000 years. In India, classical texts like Rigveda, Athurveda, Charaka Samhita, and Sushruta Samhita, along with tribal medicine, highlight the country's wealth of medicinal plants.

Ayurveda, a 5,000-year-old lifestyle science, emphasizes the integration of herbs, diet, exercise, yoga, and massage. According to Ayurveda, each individual has a unique constitution, or Dosha, a combination of Vata, Pitta, and Kapha, which governs bodily functions. Imbalances in these Doshas can lead to various health issues.

Diet has always played a significant role in Ayurveda for preventing and treating diseases. The science of food and nutrition was so advanced that Charaka categorized food into 12 classes and further subcategorized them. Ayurveda also emphasizes the importance of nutritious food in various aspects of health, such as aging, convalescence, and maintaining vitality.

Ayurvedic dietary supplements, including herbal remedies, are gaining popularity as complementary products. India is a leading producer of medicinal plants, with a vast number of traditional practitioners using plant-based formulations. The country has a significant number of manufacturing units producing natural health products, with more than 1,500 herbal products available as dietary supplements.

The resurgence of Ayurveda in recent years can be attributed to the growing acceptance of a holistic approach to health, integrating diet, exercise, and herbal therapies. This has led to an increase in consumer demand for Ayurvedic herbs and products.

TABLE 1: Select Ayurvedic Herbs with Nutraceutical Potential & Primary Uses in Traditional Medicine

Plant Name	Common Name	Traditional Uses
<i>Asparagus racemosus</i> Willd	Shatavari	Ayurvedic rejuvenative; Supports women having hysterectomies; Helps to maintain clean urinary tract, strengthens immune system and purifies blood
<i>Bacopa monnieri</i> L.	Brahmi	Memory enhancer; Mental and physical fatigue; Insomnia; Anxiety; Attention deficit-hyperactivity disorder (ADHD); Tonic to fight stress
<i>Boswellia serrata</i> Roxb	Indian Frankincense	Respiratory ailments; Digestive disorders; Joint pain and inflammation; Asthma; Arthritis; Inflammatory bowel diseases
<i>Commiphora mukul</i> Engl.	Guggul	Immuno-modulating properties by enhancing white blood cell count; Joint health; Lower cholesterol and triglycerides, while maintaining the HDL to LDL ratio
<i>Garcinia cambogia</i>	Garcinia	Helps reduce body's ability to store fat; Lowers body weight through appetite control; Lowers serum triglycerides; Creates a process in the body called thermogenesis; Helps with catarrhal conditions of the throat, urinary system and uterus
<i>Melia azadirachta</i> L.	Neem	Used as a tonic and astringent that promotes healing; Anti-spasmodic and detoxifying properties; Beneficial effects on circulatory, digestive, respiratory and urinary system
<i>Piper longum</i> L. and <i>Piper nigrum</i> L.	Indian Long Pepper and Black Pepper	Stimulant for both the digestive and the respiratory systems and has a rejuvenating effect on lungs; Enhances thyroid hormone level; Enhance the bioavailability and absorption of other active ingredients
<i>Tinospora cordifolia</i> Miers	Guduchi	Anti-bacterial; Immunomodulator
<i>Withania somnifera</i> (L.) Dunal	Ashwagandha (Indian Ginseng)	Increases energy, youthful vigor, endurance, strength and nurtures the time elements of the body; Increases vital fluids, muscle fat, blood, lymph, semen and cell production; Counteracts chronic fatigue, weakness, bone weakness, loose teeth; Helps to invigorate the body by rejuvenating the reproductive organs
<i>Zingiber officinale</i> Rosc	Ginger	Enhances absorption and prevents gastrointestinal side effects; Improves digestion and to prevent nausea; Anti-inflammatory; Anticancer

Source: Adapted and modified from Pandey et al. 2013, Evidence-Based Complementary and Alternative Medicine

Recent research has also highlighted the potential of Ayurvedic components in developing evidence-based nutraceuticals. For example, KeenMind, a nootropic derived from the Ayurvedic herb *Bacopa monnieri*, has shown benefits in enhancing cognitive functions. Similarly, CurcuWIN, a curcumin formulation, and Casperome, a *Boswellia serrata* extract, have demonstrated improved bioavailability and efficacy in human trials.

CONCLUSION

The integration of nutraceuticals with traditional Ayurvedic medicine is likely to lead to long-term consumer acceptance, especially when supported by modern medical research. While many Ayurvedic products have entered the global market, more evidence is needed to ensure their quality, safety, and efficacy before they can be widely adopted in national health systems for disease prevention.