

Research article

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# Personalized nutrition concept depicted in homeopathy and ayurveda

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#### **ABSTRACT**

Phytochemical evaluation and nutritional formulation synergies is an emerging science. The term personalized nutrition has been established in traditional medicine, a person's character, immunity and metabolism had been experimented and practiced with natural principles. Action of food on health and disease state needs to be understood from Individualization concept. Food plays a vital role in development of fetus up to old age health condition. Hippocrates quoted "Let Food Be Thy Medicine And Medicine Be Thy Food" - The Future of Holistic Healthcare.

**Keywords:** Personalized Nutrition, Individualization, Tri-dosha Theory

#### INTRODUCTION

Modern nutritional science has confirmed the benefits of traditional homeopathic and ayurvedic herbs. The foundation of personalized nutrition is laid by our ancestors of traditional medicine. Potent phytochemicals and minerals, elements protect body from carcinogens, depression, allergy, metabolic changes, stimulates immune cells.

### **Protection from carcinogen**

There are lab studis suggesting food has anticancer effect are disappointingly ineffective in cancer patient. Sulphur is a commonly prescribed remedy in Homeopathy; Food containing Sulphur has potential effect in cancer concomitant therapy. Organic and inorganic sulphur compound studies state it may be useful as prevention and inhibition of cancer cell proliferation [1]. Allium family namely Onion, Garlic, contains variety of sulphur componds [2].

#### **Allergy**

In early childhood food related allergy symptoms are more common and it is a sign of developing immunity [3]. Recent approach of treating food allergy with probiotics has shown consistent improvement especially selective strain specific bacteria according to type of allergy or allergens [4].

## **Immunity**

Defense provided by functioning of immunity can be modulated by correct food. Homeopathy considers intellectual, behavioral signs and symptoms in drug proving, as a person's character is reflected as the immunity from environment. Successful application of dietary recommendation for immunomodulation has long being employed in traditional medicine.

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#### **Depression**

Magnesium helps improve symptoms of depression [5], Supplementation of magnesium, Vitamin B 12 and Folate has been studied in RCT with positive results. Increase intake of high calorie food is associated with deregulation of stress hormone cortisol, Circulatory corticosteroid association with metabolic changes and obesity has been elucidated [6].

If Nutritional goal is not achieved it causes long term deficiency which leads to increased disease susceptibility. In case of chronic and lifestyle diseases AYUSH system needs support from nutritional aspect. RCT trial has proved role of nutrition in following health condition.

- Folic Acid Birth Defect
- Calcium Osteoporosis
- Omega Fatty Acid Atherosclerosis
- Vitamin D Calcium Deficiency
- Vitamin C Cold and Flue
- Iron Anemia
- Allium Family Plants Cancer Progression
- Aspargus Recemosus Lactation
- Probiotics Gut Health
- Curcumin Osteoporosis

#### **Fats**

Several randomized controlled trial has demonstrated anti-inflammatory properties of essential fatty acid. There are two basic type of fats saturated and unsaturated, If an individual lack enzymes for fat metabolism, It might damage tissues of brain, spleen, liver and heart.

#### **Proteins**

Proteins are essential for physical development; bioavailability of protein differs in plant and animal protein. In case of deregulation of protein metabolism harmful toxic substance buildup in body, sever inflammation, muscle contraction, and insulin secretion is affected.

### **Carbohydrates**

Carbohydrates are most nourishing energy efficient fuel source. These are consumed by body tissue in simpler form such as glucose, sucrose and fructose. Constant supply of glucose is required for metabolic function of brain, rbc and inner portion of adrenal medulla. Disturbed sugar metabolism is needs to be studied to understand insulin resistance.

#### **Minerals**

Minerals are required for enzymatic function. Deficiency of minerals depends on kind of daily work; these micronutrients are required as person's life style. Long term deficiency results in adverse changes in normal physiological functions.

#### **Vitamins**

Vitamins are essential for metabolism, nerve impulse, anemia, fatigue, heart diseases. Constitution wise investigation supplementation is helpful to rebalance body vital energy. Vitamin B is important for cognitive function; especially Vitamin B 12 role in DNA production is well studied. Frequent consumption of water soluble vitamin is must as it eliminates in urine and sweat. Fat soluble vitamins are stored in fatty tissue.

#### DISCUSSION

Action of Homeopathic medicine on autonomic nervous system is confirmed by Dr. Akalpita S Paranjpe using medical analyzer system at electronics division, BARC, Mumbai Maharashtra India [12]. Similarly association between physiological patterns and tridosha theory, prakriti parikshan and Metabolism in ayurveda is well explained with knowledge of complex physiological reactions [13, 14].

Autonomic nervous system (ANS) serves as communication between external environmental stress a person encounters and in stability of internal environment. metabolic and endocrine activities, sexual behavior, micturition, respiration, intestinal movement, cardiovascular system are governed by ANS.

Emotional arousals like increase or decrease in heart rate, gastric motility, cutaneous blood flow, blushing, piloerection, and sweating are governed by sympathetic nervous system (SNS). It prepares body to utilize metabolic resources; parasympathetic nervous system promotes building up of metabolic reserve, every person is different according to his reaction to surrounding.

Sympathetic nervous system governs development of asthma complaints, sympathetic

activity increases in bronchial asthma to balance parasympathetic over activity [7].

Finding from muscle sympathetic nerve activity (MSNA) studies, suggest that inverse relationship between MSNA and Cardiac output [8]. Sympathetic and parasympathetic nervous system infiltrate tumors to contribute early stage of gastric and prostate cancer [9]. Glucose deregulation is associated with autonomic dysfunction [10]. SNS has role in pro-inflammatory process, and impairment in immunity is cause of infection [11].

Scientists are exploring complex physiological function and role of food to improve longevity. The dynamic organization of structural, biochemical function and enormous co-ordination of organ function offers scope to understand ayurveda conceptualize theory. The conventional western medicine views body from structural perspective. Whereas ayurveda mentions human body system and different health approaches with different terminologies and metaphor.

There are distinctive concept of ayurveda such as dravyaguna, bajikarna, rasayan tantra,

kayachikitsa tantra, ayurveda states 'Preservation to Health of Healthy Person and Treating Ailments with Breaking Causative Factor of Pathogenesis'.

Ayurveda is not restricted to few samhitas, but scattered through other mythological text like smruti, smriti and puranas. The much overlooked homeopathic system of medicine has immense benefits of immunity development. Homeopathic constitution wise food habits and aversion are experimented in details. Its principal states Ideal cure, varying degree of disease susceptibility and protection from natural diseases.

#### **RESULT**

Many healing plants in ayurveda and homeopathy are to be studied as individualized essential food to prevent diseases.

Following are few ayurveda/ homeopathy medicinal plants mentioned in Food Safety Standard Authority of India Gazette Notification 6 January 2017, its primary use as food supplement.

| Sr. | <b>Botanical Name</b>    | Common Name          | Benefits   |
|-----|--------------------------|----------------------|--|
| No. |                          |                      |  |
| 1   | Allium Sativum           | Garlic               | Anti-Inflammatory, Anti-Bacterial, Rheumatism, Skin<br>Affection, Alopecia |
| 2   | Ginkgo Biloba            | Maiden Hair<br>Tree  | Memory Enhancer and Anti-Oxidant   |
| 3   | Zingiber Officinalis     | Adrak                | Bronchitis, Hyperglycemia, Diarrhea  |
| 4   | Panax Ginseng            | Ginseng              | Debility, Lumbago, Sexual Excitement                                       |
| 5   | Glycyrrhiza Glabra<br>L. | Mulethi              | Anti-inflammatory, Expectorant, Anti Allergic                              |
| 6   | Hypericum<br>Perforatum  | Basant               | Neuralgia, Scar, Ulceration Wound  |
| 7   | Curcuma Longa            | Turmeric             | Antiseptic, anti-Arthritis, Anticancer, Antiseptic                         |
| 8   | Allium Cepa              | Onion                | Hypoglycemia, Ant atherosclerosis  |
| 9   | Aloe Barbadensis         | Ghikvar              | Dilates Blood Vessels, Wound Healing, Constipation                         |
| 10  | Cassia Angustifolia      | Senna                | Purgative  |
| 11  | Centella Asiatica        | Gotu Kola,<br>Brahmi | Spasmolytic, Anti-Anxiety, Liver Affection, Gall Stone,<br>Dropsy          |

#### **Ayurveda Theories**

- 1. Tridosha Theory
- 2. Sapta Dhatu Theory
- 3. Panchbhuta Theory

#### **Fundamental Principals in Homeopathy**

- 1. Law of Similia
- 2. The Minimum Dose
- 3. The Totality of Symptoms

Enormous research has been conducted to evaluate plant structural properties and active ingredients. There is further scope to evaluate of personalized concept nutrition, homeopathic and ayurveda natural law, theories, principals. Homeopathic constitution wise food advice will synergize bodily resistance. Ayurveda conceptual tacit knowledge about panchbhuta, sapta dhatu, tridosha, tatva can be implemented in understanding of broadly experimented homeopathic medicine constitution and action of food on body.

#### **CONCLUSION**

Allopathic drug response differs to different individuals with same disease, complex biochemical and physiological function of genes, gene therapy holds promise for cure in human disorder and lifestyle diseases. Homeopathy has been warmly recognized and highly accepted by Indian society. Traditional ayurvedic vaidya prescribed particular diet according to seasons with prakriti examination.

Concept of personalized nutrition is particularly very helpful for ayurvedic and homeopathic practitioner to treat patients with

- Family history of lifestyle diseases
- Older age patients with risk of developing diseases
- New born and adolescent were immunity is in developing stage
- Avoid recurrence of symptoms or short relief in case of chronic diseases

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