Role of Diet and Lifestyle Modification in the Prevention of Cardiovascular Disease: A Review Study

Dr. Dharmendra Mishra¹, Dr. Shalinee K Mishra²

¹MD, PhD Rachana Sharir, Associate Professor, Indian Institute of Ayurved Research & Hospital, Rajkot, Gujarat, India
²MD, PhD Swasthavritta, Assistant Professor, Institute of Teaching and Research in Ayurveda (ITRA), Institute of National Importance, Govt. of India, Jamnagar, Gujarat, India

ABSTRACT

Introduction: Some common factors like Smoking, Insufficient physical activity, alcohol, inadequate consumption of fruits and vegetables, more use of fatty and salty food ("lag time effect"), obesity and overweight, occupational hazards etc. are work as risk factors for cardiovascular disease. **Material and Methods:** The present study referred various Ayurvedic texts, modern medical science books, and Indian mythological literature as well as the available internet data and journals. **AIMS AND OBJECTIVE:** To evaluate the concept and importance of diet and life style modification in prevention of cardiovascular disease. **Conclusion**: Dietary and life style modification in the form of *Pathya – Apthya* like to use *Laghu purana anna, Yava & Godhum, Dugdha etc and avoid the Ushna Amla Lavana Kshara Katu, Guru Snigdha etc.* decreases the chance of vitiation of *Dosa* of *Pranvaha* and *Rasavaha Srotas* and have less chance of cardiovascular disease.

Keywords: Cardiovascular disease, Diet, Life style, Pathya-Apathya, Pranvaha shrotas

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INTRODUCTION

Chronic non-communicable diseases are assuming increasing importance among the adult population in both developed and developing countries. Chronic non-communicable diseases are assuming increasing importance among the adult population in both developed and developing countries. Cardiovascular diseases is at present the leading causes of death in developed and developing countries. Life expectancy is increasing in most countries and a greater number of people are living to older ages, and are at greater risk to chronic diseases of various kinds. The lifestyles and behavioural patterns of people are changing rapidly, these being favourable to the onset of chronic diseases. The worldwide cardiovascular death in 2020 in 17.9 million and nearly 32 % of total NCD deaths was reported.^[1]

India is experiencing a rapid health transition with a rising burden of NCDs causing significant morbidity and mortality, both in urban and rural population,

with considerable loss in potentially productive years (age 35-64) of life. Out of 4 main NCD, death due to CVD (27%) 2.59 million, is maximum.

Some common factors like Smoking, Insufficient physical activity, alcohol, inadequate consumption of fruits and vegetables, more use of fatty and salty food ("lag time effect"), obesity and overweight, occupational hazards etc. are work as risk factors for cardiovascular disease.

There are also a number of underlying determinants of CVD or "the causes of the causes."^[2]

Ayurveda explain very well of its causes of the causes (*Apathya* and *Pathya*) and also specifies the main vitiating channels (*Srotodusti*) like *Rasavaha* and *Pranavaha Srotas* are vitiated by Common causative factors like Excessive intake of heavy, cold, excessively unctuous food and over worry, Wasting,

suppression of natural urges, indulgence in ununctuous things, exercise in hungry state etc. ^[3]

Material and Methods:

The present study referred various Ayurvedic texts, modern medical science books, and Indian mythological literature as well as the available internet data and journals.

AIMS AND OBJECTIVE

To evaluate the concept and importance of diet and life style modification in prevention of cardiovascular disease.

REVIEW OF LITERATURE

First to define the life style as per Ayurveda science which can affect the health status, like food intake and drinks, place of food intake, walk, sleeping pattern, sedentary work quantity, food quantity, application of hygiene methods for body like application of *Anjana*, *Dhum*, *Nasya*, *Abhyanga*, *Pramarjana*, *Vega Dharana* and *Vidharana*, regular practice of exercise, *Ahara vidi*, follow the *Satmendriya Sanyoga* and *Sadvritta*, all these are responsible for maintenance of health. ^[4]

Regular practices of *Gramyaahara* commonly causes the all types of non-communicable diseases (NCD) like cardiovascular disorder, musculo-skeleton disorder, infertility, mental disorders and ultimately decreases the life span.^[5] Out of common causative factors some specific factors are described by Acharya for particular vitiation and cardiovascular disorder as in table 1.

S. N.	Apathya ^{[6],[7]} (Specific Causative Factor)	Pathya ^{[8],[9] Bhaishaya 33/78-81} (Preventive Factors)
1	Shushka Ruksha	Laghu purana anna Yava & Godhum
2	Ushna amla lavana kshara katu 🦯 🛒	Dugdha
3	Guru snigdha 🥢 🧭 📣 🖤	Ghee
4	Pishtanna 🖉 🎺 📲	Madhu
5	Til ksheer gudadi 🛛 🖉 🏷 📑 📘	Amlaphala (Dadima, Amala)
6	Ajeerana Bhojana 🛛 💋 🍃 🖡 🚬 💛	Hingu
7	Madya Z E	Yusha (Kulattha, Aadhaki, Mudga Yusha)
8	Aatapa 🛛 🛛 🗧 🚦 of Fre	Ragashadava
9	Vyayama (in excessive) 🏹 🍝 🚦 🛛 🥂 🥵	Use of sauviraka, Tushodaka
10	Acheshta	Meat soup of birds, chicken, goat and Jangala meat soup
11	Sandharana 🛛 🔨 💊 🍬	Vartaka (Solanum melongena)
12	Chinta Bhaya shoka trasa 🛛 🔨 🍫	Patola (Trichosanthes dioica)
13	Achintanam	Lukewarm water
14	Atikarshana	Rock salt
15	Abhighata	Black salt
16		Pushkarmula (Iris germanica)
17		Regular Exercise

Table: 1 Specific Causative Factors and Preventive Factors of the Cardiovascular Disease

Vitiated *Dosha* reaches the heart and pervert the *Rasa Dhatu* and generates the cardiac diseases.

Prevention

Prevention is a complex mix of interventions. Primordial and primary prevention are more effective in the prevention of CVD. Like prevention of smoking, alcohol and restricting access to retailed, reduce salt and fat and processed food intake and promote physical activity.^[9]

Discussion

Apathya:

Intake of dry and rough food aggravate Vata Dosha, Ushna, Amla, Lavana, Kshara and Katu rasa dominant food aggravate Pitta and Vata Dosha. Guru Snigdha, Pishtanna, Tila, milk, and jaggery aggravate the Kapha and Meda. It also initiates the formation of Granthi (nodule) in Rasavaha channels and obstructs the normal flow. *Ajeerna Bhojana, Ama* and *Vidagdha Ahara* vitiate *Rasavaha* and *Pranavaha Srotasa*. Exercise, suppression of natural urges (*Ashru, Shramjanya Nihshwasha and Shukravega*), fear, anger and mental torture vitiate the *Pranavaha Srotasa* and aggravate *Vata Dosha*. Excessive mental relaxation, sedentary life and day time sleep aggravate the accumulation of fat in small channels and obstruct the flow of nutrients to target organs. Fasting causes *Oja Kshaya* and increases the *Tama Dosha* in heart.[^{10]} Accidents some time vitiate the *Pranavaha Srotasa* due to *Aghata*.

Pathya:

Old cereals (Shali, Shashtika, Yava and Godhuma) have Madhura, Kashaya, Laghu Anabhishyandi and

Jeevaniye Guna. It alleviates Vata and Pitta Dosha. Yava have some Lekhana Guna, it remove accumulated Kapha and Meda from small channels and prevent the accumulation of Dosha. Soup of Adhaki, Kulatha and Mudga it remove accumulated Kapha and Meda, by its Kashaya and Lekhana Guna. Green vegetables (Patola, Vrintaka and Jeevanti) reduce the Meda from small channels. Milk, Ghee, and meat (Ena, Aja, Kukkuta, Prasaha, Vileshaya) soup have Hridya Guna, it alleviate the Vata Dosha.

Acidic fruits (Dadima, Amlaka, Badara, Matulunga and Jambeera) have Hridya Guna (cardio protective), it protect the heart. Honey have Lekhana Guna, it remove accumulated Kapha and Meda from small channels. Old alcohol (formed by Honey, Dhataki flower) have Hridya, Deepana and Rochana Guna, it stimulate the Jatharagni and alleviate the Vata Dosha and Ama. Hingu, Saunchara Lavana (black salt), Pushkaramool, Raga Shadava, Sauviraka and Tushodaka have Hridya Guna, it subside the Vata and Kapha Dosha in the channels, because have Ushana, Tikshana and Suksham Guna it enters in to small channels and removes the accumulated Kapha and Meda. Ushnodaka digest the Ama Dosha of channels and alleviated the Vata Dosha. Pleasant environment, Achintana and comfortable bed, have heart protective property.

Conclusion:

Dietary and life style modification in the form of lopmer Pathya – Apthya like to use Laghu purana anna, Yava & Godhum, Dugdha, Ghee, regular prescribed exercise etc, and avoid Ushna amla lavana kshara katu, Guru snigdha, Pishtanna, Til ksheer gudadi, Ajeerana Bhojana, Madya, etc. decreases the chance of vitiation of Dosa of Pranvaha and Rasavaha Srotas and have less chance of cardiovascular disease.

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