

## ROLE OF DIET AND LIFESTYLE MODIFICATION IN THE PREVENTION AND MANAGEMENT OF CARDIOVASCULAR DISEASES

Dr. Vinita Pandey\*<sup>1</sup> and Dr. Suwarna D. Vyas<sup>2</sup>

<sup>1</sup>P.G. Scholar, Govt. Ayurved College, Nagpur.

<sup>2</sup>Assistant Professor, Dept. of Kriya Sharir, Govt. Ayurved College, Nagpur.

Article Received on  
11 July 2022,

Revised on 01 August 2022,  
Accepted on 22 August 2022

DOI: 10.20959/wjpr202212-25336

**\*Corresponding Author**

**Dr. Vinita Pandey**

P.G. Scholar, Govt. Ayurved  
College, Nagpur.

### ABSTRACT

The 21<sup>st</sup> century we are living in, is the era of globalization and cut throat competition. We are running a rat race without realizing how badly it is affecting our health. It turns out that this sedentary-robotic-lifestyle is now centering and attacking the Cardio Vascular System making us pay for all the negligence we have done on our part. Cardio Vascular Diseases are the leading cause of deaths worldwide accounting for 32% of all the deaths globally (2019). While much emphasis has been provided on the prevention of primary risk factors such as Diabetes Mellitus, Hypertension and Central Obesity, the other

triggering risk factors such as Stress has not been taken into optimum consideration. In Ayurveda, *Hridaya* is described as one of the three main *Marmas*. It is one among the ten *Pranayatan*, signifying the importance it holds. The careful application of preventive measures and treatment guidelines that include both diet (*Aahar*) and lifestyle regimen (*Vihar*) along with specific Ayurvedic therapies i.e. Palliative (*Shaman*), *Panchkarma* (*Shodhan*) and *Sadvritta* (good conduct) provided in the context of *Hridroga* can help minimizing the risks. Non pharmacological intervention such as Yoga and *Pranayam* has shown to produce better control over the Blood pressure in the patients of Hypertension and Arrhythmia. Here is an attempt for the prevention and management of Cardiovascular diseases that can be done by following the 'Trilogy of Healthy Cardiac Living: CVS' on an individual level. It focusses upon: controlling the unnecessary stress and workload (**C-Control**), keeping a check on our diet (**V-Vigilance**) and systematizing our lifestyle (**S-Systematize**) so as to bring a variation in the Quality of Life and prevent further damage to the Cardio Vascular System.

**KEYWORDS:** Cardio Vascular Diseases, Blood Pressure, Lifestyle, Stress, Yoga, Pranayam.

## INTRODUCTION

Cardiovascular diseases are addressed as '*Hridroga*' in Ayurveda. There has been a significant incline in the incidences of heart diseases in the fast few years even in young aged people throughout the world. The annual number of deaths from Cardiovascular diseases in India is projected to rise from 2.26 million (1990) to 4.77 million (2020).<sup>[1]</sup> Faulty dietary habits, sedentary life style, smoking, obesity, mental stress, high BMI are some of the reasons that result in decreased functioning of the heart.

Ayurveda proposes a different understanding of the etiopathogenesis, management, prevention and treatment in the context of *Hridroga*. Five types of *Hridroga* has been described in *Charak Samhita* according to the doshas revealing different symptoms.<sup>[2]</sup> The treatment include herbs, *Pathya sevan*, *Rasayan prayog*, *Shaman*, *Shodhan* that assist better functioning of the heart at the optimum level and focusses on preventing *Khavaigunya* to prevent its reoccurrence.

The *Prayojan* of Ayurveda is '*Swasthasaya swasthrakshanam*' that deals with protecting the health of an individual first and later treating the disease.<sup>[3]</sup> The *Ahar*, *Vihar*, *Dincharya*, *Ritucharya*, *Sadvritta palan*, *Dhyan*, *Yoga* and *Asana* mentioned in the texts, form the basis for the prevention of the Cardiovascular diseases.

## AIM

To outline the importance of healthy diet and life style modification in the prevention and management of Cardio vascular diseases.

## OBJECTIVES

1. To emphasize the effect of Stress on CVS and the measures to control it. (C)
2. To outline the Ayurvedic aspect of diet. (V)
3. To signify the importance of Systemic lifestyle as per Ayurveda. (S)

## MATERIALS AND METHODS

Various Ayurvedic and Modern texts, Samhitas, published articles, research papers and information available on the internet was used while formulating this article.

## Trilogy of Healthy Cardiac Living

### 1) Controlling the Unnecessary

We are living in this fast paced society with continuous deadlines and pressures that results in stress and anxiety in the long run. Stress is a significant factor identified that increases coronary spasm. The various physical and psychological stresses result in increased blood pressure and heart rate ultimately increasing the myocardial oxygen demand (MVO<sub>2</sub>).

Continuous workload stress not only increases the risk of CVDs but also reduces the potential of an individual as a whole, provoking him to question his existence and capabilities. *Acharya Charak* has also mentioned *Atichinta* as a causative factor for *Rasvaha strotodushti* in *Viman sthan* thus implying its effect on the CVS.<sup>[4]</sup> High alcohol consumption and use of tobacco are also known to hamper the cardio vascular functioning. This critical juncture demands a **Control over the unnecessary inputs** that damage the major bodily functions.

It is not what you eat that kills you; it is what eats you (negative thoughts) that kills you.<sup>[5]</sup> There are different Yoga and *Pranayama* that have known to help an individual by allowing him to abstain from the factors that cause mental agony.

*Anulom Vilom* helps in purifying blood with better oxygen supply and removing any blockages.

Mudra Science is an ancient Science which connects the energy to the body system (mostly the brain). It helps in linking the body to the brain by stimulating endorphins, changing mood, increasing vitality, improving concentration and relieving stress thereby giving a peaceful mind. Yogamudras like *Hridaya mudra*, *Shoonya mudra*, *Aakasha mudra* are beneficial in cardiac diseases. *Hridya Mudra* is done by bending the index finger and placing it at the base of the thumb. The thumb is now touched to the middle and ring fingers, leaving the little finger in a relaxed position. This mudra balances the Blood Pressure and redirects *Prana* towards the heart.

Chanting mantras, aroma, gem stones, colors, music therapy are some of the methods that can help reducing the stress levels.



## 2) Vigilance – be vigilant enough to check what goes inside your mouth

Faulty dietary habit is one of the major reason for developing central obesity, high cholesterol level and dyslipidemia that ultimately makes a positive way for Cardio vascular diseases.

According to Ayurveda, the food with incompatible or contradictory qualities i.e. *Viruddhahara* has poisonous effect on the body that aggravates *Tridohas* in turn leading to various disorders. If the quality and quantity of *Ahara* and *Koshthagni* are not in appropriate condition, it leads to improper digestion of food and subsequent formation of abnormal *Ras Dhatu* which has direct impact on *Hridya*, the site of *Rasvaha srotas*.<sup>[5]</sup>

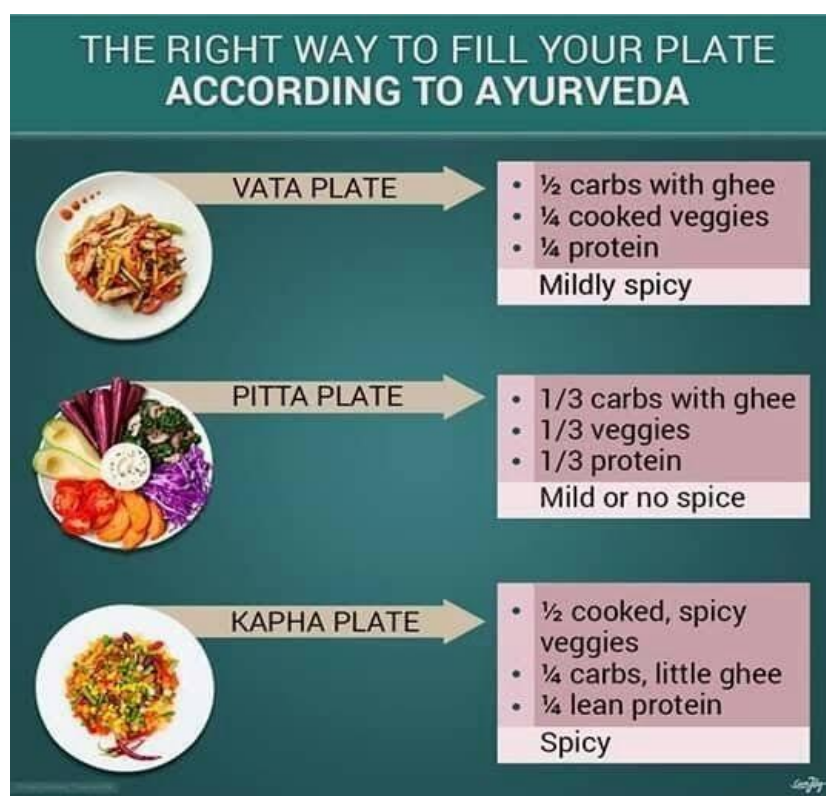
DASH diet (Dietary Approach to Stop Hypertension) is one of the three healthy diets recommended in 2015-2020 U.S. dietary guidelines (which also include the Mediterranean diet and a vegetarian diet) to prevent and control HTN which is rich in fruits, vegetables, whole grains and low fat dairy foods.<sup>[6]</sup> Cardiac Diet also known as ‘Heart Healthy Diet’ advocates increased intake of complex carbohydrates, soluble fibers and omega 3 fatty acids.

In Ayurveda, specific principles have been described for consuming diet. i.e. *Ashtavidha Ahar Visheshayatan*.<sup>[7]</sup> Similar to the DASH diet, we as Ayurvedic practitioners can plan and recommend a complete **Ayurvedic Diet** that reduces the risks of cardio vascular diseases. Acharya Charak has mentioned ten *dravyas* in *Hridya Mahakashaya* that are beneficial to the heart.<sup>[8]</sup> Similarly *Parushakadi gana* described by Acharya Sushruta also aims at improving the conditions of the *Hridaya*.<sup>[9]</sup> Acharya Vagbhata has also mentioned *Vaidaryadi gana* that has cardio protective functions.<sup>[10]</sup> These *dravyas* when given alone or in combination can be

of best therapeutic value. The food items which can be used on a regular basis like *shali*, *shashtik* etc. are also mentioned in the Ayurvedic texts along with the food items that cannot be used regularly.<sup>[11]</sup> **This allows one to keep a check on what goes inside their mouth.**

The baseline of the Ayurvedic diet can be formed by the *Ahara Varga* described by different Acharyas. *Prameh* is a *santarpanjanya vyadhi* and its line of treatment includes *rukshanna* like *yava* and *godhum*.<sup>[12]</sup>

Knowing one's *Prakriti* allows an individual to choose between the do's and don'ts for daily routine and to be in healthy state. The Ayurvedic diet when planned according to the *Prakriti* will be of utmost benefit to the patients. After diagnosing the type of *Hridaya roga* pertaining to its symptoms, a particular diet can be provided while keeping the *Prakriti* of an individual into consideration.



### 3) Systematize your lifestyle

The decline in the physical activity levels in the past decades can be attributed to a combination of factors, including jobs becoming less physically active and more 'desk based', the reliance on motorized transport rather than walking, cycling and growth in the popularity of sedentary pastimes involving televisions and computers.<sup>[13]</sup>

'*Asyasukham swapnasukham*' are the causative factors of *Prameh* described in Ayurvedic texts that clearly provide a picture of sedentary lifestyle.<sup>[14]</sup> The Ayurvedic approach to a healthy lifestyle include *dincharya* (day-time regimen), *ratrichrya* (night regimen), *ritucharya* (seasonal regimen) and *sadvritta* (good conduct). It starts with brining a change in the morning schedule by waking up during the *Brahma muhurta* (4 am to 5:30 am). Hippocrates has quoted that '**Nature itself is the best Physician.**'

Timely sleeping and following a proper healthy routine allows the normal circadian cycle of the *Tridoshas* thus maintaining the equilibrium between the *doshas* and body. The *Adharniya vegas* should not be retained in the body and daily practice of *Vyayam* should be included in the routine.

*Suryanamaskar* produces *laghutva* in the body, channelizes *dhatu paka* process and reduces *Kapha* and *Meda*. *Bhujangasana*, *Dhanurasana*, *Pada hastasana*, *Shashankasana* are some of the asanas that improve flexibility, poor circulation and strength of the spine which can encounter all the adverse effects of sedentary lifestyle.



## DISCUSSION

*Hridaya* has been described as '*Artha*' and '*Mahatta*' in Ayurveda.<sup>[15]</sup> Keeping the present scenario in mind, it becomes a prime goal to adapt and execute a precautionary approach to a healthy heart. *Yoga* and *Pranayam* help in relieving stress thus freeing the mind from negative thoughts. *Mudra* practicing has been known to regulate Blood Pressure and redirects *Prana* to the *Hridaya*.



*Viruddh ahara* results in the formation of abnormal *Ras Dhatu* thus impacting the cardiovascular system directly. The Ayurvedic Diet thus focusses on the food taken by an individual owing to one's own *Prakriti*.

Along with the *Ahara*, it becomes mandatory to keep a check on the *Vihara* as the major causes of CVDs are owned by a sedentary lifestyle. Taking *Dincharya*, *Ratricharya* and *Vyayaminto* consideration, one can overcome these ailments.

This is what Jim Rohn has quoted that we all need to keep in mind, "Take care of your body, it's the only place you have to live."

## CONCLUSION

Ayurveda is a combined system of health that shares a symbiotic relationship with the community we live in. The present situation demands the implementation of classical knowledge of cardiac diet and lifestyle into real practice that can be beneficial to the society as a whole. With the rise in the number of cases of cardio vascular diseases, it becomes our foremost priority to recognize and avoid the precipitating factors that are causing damage to the body. Recognizing the importance of heart as a *Pranayatan*, systemic lifestyle modifications, stress management, abstinence from the addictions and following a strict *Pathya* diet plan can pave a way to the healthy heart.

## REFERENCES

1. C.J. Murray, A.D. Lopez. Alternative approach of mortality and disability by cause 1990-2020: Global Burden of Diseases Study. Lancet, 1997; 349: 1498-1504.
2. Shastri K. Charak Samhita of Agnivesh: Chaukhambha Bharati Academy, Varanasi, 2016; Vol. 2, Chikitsa Sthan, Chapter 26, Verse 77-103, Page No. 731-736.
3. Shastri K. Charak Samhita of Agnivesh: Chaukhambha Bharati Academy, Varanasi, 2016; Vol. 1, Sutra Sthan, Chapter 30, Verse 26, Page No. 587.
4. Shastri K. Charak Samhita of Agnivesh : Chaukhambha Bharati Academy, Varanasi, 2016; Vol. 1, Viman Sthan, Chapter 5, Verse 13, Page No. 713.
5. CCRAS, Ministry of Ayush, Govt. of India, Delhi. Ayurvedic based diet and life style guidelines for prevention of cardiac disorders. First edition, 2018.
6. 2015-2020 Dietary guidelines for Americans. Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services. 7 November 2019.
7. Shastri K. Charak Samhita of Agnivesh: Chaukhambha Bharati Academy, Varanasi,

- 2016; Vol. 1, Viman Sthan, Chapter 1, Verse 21-23, Page No. 680-683.
8. Shastri K. Charak Samhita of Agnivesh: Chaukhambha Bharati Academy, Varanasi, 2016; Vol. 1, Sutra Sthan, Chapter 4, Verse 10, Page No. 78.
  9. Shastri K. A. Susruta Samhita of Maharshi Susruta, Ayurveda-Tattva-Sandipika Hindi Commentary: Chaukhambha Sanskrit Santhan, Varanasi, Reprint 2017, Vol 1, Sutra Sthan, Chapter 38, Verse 43-44, page no. 186.
  10. Gupta. K. A. Astanghrdayam of Vgabhata edited with the 'Vidyotini' Hindi Commentary: Chuakhambha Prakashan, Varanasi, Reprint 2018, Sutra Sthan, Chapter 15, Verse 9-10, Page No. 141.
  11. Shastri K. Charak Samhita of Agnivesh: Chaukhambha Bharati Academy, Varanasi, 2016; Vol. 1, Sutra Sthan, Chapter 5, Verse 10 -12, Page No. 106.
  12. Shastri K. Charak Samhita of Agnivesh: Chaukhambha Bharati Academy, Varanasi, 2016; Vol. 1, Sutra Sthan, Chapter 21, Verse 5 &9, Page No. 436-437.
  13. Kavita Sharma, Preeti Sharma, Ruhi, Akhilesh K. Srivastava. Management of Metabolic Syndrome Through Ayurveda. International Journal of Ayurveda and Pharma Research, 2020; 8(1): 87-93.
  14. Shastri K. Charak Samhita of Agnivesh: Chaukhambha Bharati Academy, Varanasi, 2016; Vol. 2, Chikitsa Sthan, Chapter 6, Verse 4, Page No. 227.
  15. Shastri K. Charak Samhita of Agnivesh: Chaukhambha Bharati Academy, Varanasi, 2016; Vol. 1, Sutra Sthan, Chapter 29, Verse, Page No.