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Pathya in Pittaavrut Praana with special reference to Essential Hypertension: A critical review

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Abstract:

Background: Essential hypertension (EH) is a major slow epidemic emerging in every sector of the society. EH exhibits signs and symptoms that are very similar to those of *Pittaavrut Praana*. Also, their aetiological factors and complications show close resemblance. Hence it can be concluded that EH can be correlated with *Pittaavrut Praana*. EH, a cause for many fatal diseases e.g. Cardiovascular disease (CVD), Cerebrovascular accident (CVA), Chronic Renal Failure (CRF), etc., needs attention at every level and diet is no exception. **Aim:** To review *Pathyaahaara Kalpanaa* in *Pittaavrut Praana* w.s.r. to Essential Hypertension. **Materials and methods:** *Ayurvedic* texts and scientific articles and websites were studied to learn the disease condition and its pathology in depth. The food items were selected based on the line of treatment of *Pittaavrut Praana*, as mentioned in *Ayurvedic* texts. Their mode of action was then established after analysis and with reasoning. **Conclusion:** The progression of EH can be effectively controlled and prevented with diet modification. The efficacy of *Mrudveekaa* (raisins), *Daadima* (pomegranate), *Vrukshaamla* (*kokum*), *Aamalaki* (Indian gooseberry), *Dugdha* (milk), *Shaali* (rice), *Yava* (barley), *Palaandu* (onion), *Rasona* (garlic) and *Saindhava* (Himalayan rock salt) are well established. *Ghruta* (clarified butter) however, has been mentioned in *Ayurvedic* texts in the treatment of *Pittaavrut Praana* but no study in modern science has proved its utility.

Key words: *Pittaavrut Praana*, Essential Hypertension, EH, *Pathya*, Diet.

Introduction:

Essential Hypertension (EH), also known as Primary Hypertension, is defined as a rise in blood pressure for which there is no clearly defined aetiology that is without any underlying renal, coronary, cardiac or endocrinal cause.¹ Although the rise in blood pressure doesn't seem to be a health concern, it remains a major modifiable factor of cardio-vascular diseases (CVD).² Studies have shown strong positive correlation between the blood pressure and stroke, CVD, renal diseases and mortality, the relation being more robust with systolic than with diastolic BP.³ According to data from studies conducted, it is estimated that 26% of world's population is hypertensive (as per records of 2000) and the number is expected to rise to 29% by the year 2025, of which the economically developing countries are more likely to get affected.⁴

Considering the severity of the health problem worldwide, it calls for an intervention at every level, not to forget dietary modification. Hence an attempt has been made in this article to perceive EH through *Ayurvedic* perspective and to throw light on the dietary modification one can incorporate. This article also aims at applying scientific methods to natural dietary components that enables the consumers with objective data about which foods may or may not benefit the values of BP.

The concept of *Aavarana* is an important and not much thought about concept in *Ayurveda*. One among all the types of *Aavaranas* explained in *Ayurvedic* texts, *Pittaavrut Praana* holds a close resemblance with the slow epidemic named EH.⁵ Considering the pathophysiology and mode of treatment, proper healthy dietary pattern if incorporated in one's day to day life, may help to control the disease to a considerable extent and also prevents its complications.

The present article offers a review on *Pittaavrut Praana* and EH from different *Ayurvedic* texts and various articles on latest researches. Certain dietary items based on the line of treatment of *Pittavrut Praana* are also thrown light upon. Their mode of action in treatment of *Pittavrut Praana* and BP management according to contemporary science are elaborated.

Aim:

The purpose of the article is to review *Pathyaahaara Kalpanaa* in *Pittaavrut Praana* w.s.r. to Essential Hypertension.

Objectives:

- 1) To understand the concept of Essential Hypertension in correlation with *Pittaavrut Praana*.
- 2) To learn the treatment modules of *Pittaavrut Praana*.
- 3) To study the role of certain foods in *Pittaavrut Praana*.

Materials and methods:

A comprehensive literature search was carried out from *Ayurvedic Granthas* for the *Ayurvedic* part of information about *Pittaavrut Praana* and its treatment. Modern part of the article was derived from scientific articles and websites. The mode of action of the *Aahaareeya Dravyas*(food items) was then established after critical analysis and with logical reasoning.

Conceptual study:

Correlation of *Pittaavrut Praana* and EH

Pitta, when increases in quantity, obstructs the normal direction and pace of *Vaata*. This causes symptoms like *Bhrama*, *Rujaa*, *Daaha*, *Moorchaa* and *Vamana*⁶ which are similar to those of EH viz. giddiness, headache, burning sensation or conflation, fainting or delusion, vomiting, etc.⁷

Also, the aetiological factors of the two conditions show resemblance to a great extent. *Pittavardhak Hetus*(factors that cause abnormal increase in *Pitta*) as mentioned in our texts are similar to those that are enlisted as major risk factors by the contemporary science. *Hetus* of *Pittaavrut Praana* demand attention not just because they are the risk and causative factors of the dreadful health condition but also because the prevalence of the disease can be effectively controlled over by keeping a check on them. They are further enlisted and elaborated in order to better understand the pathophysiology. *Atilavana sevana* (excessive salt

intake) causes *Pittadushti* (abnormalcy in *Pitta*) and *Vaatavruddhi* (abnormal increase in *Vaata*).⁸ Being dominant in *Aapa* (water) and *Agni* (fire) *Tatva*, it causes increase in *Dravataa* (fluidity) as well as *Ushnatva* (heat) and *Teekshnatva* (ability to penetrate) of *Pitta*. This in turn causes *Kledana* (liquification) and *Raktavruddhi*(abnormal increase in blood).⁹ In other words, it causes Sodium retention and increase in plasma and extravascular fluid.¹⁰ *Atimadyapaana* (excessive alcohol intake) leads to *Ojakshaya* (decrease in the essence formed at the end of metabolism of the tissues), *Vaatadushti*(imbalance of *Vaata*) and *Pittadushti* leading to *Raktavruddhi* and *Dushti*(imbalance of *Rakta*).¹¹ It also has proven to damage the cardiac tissue.¹² *Manopatapta Bhaavas*(factors that negatively affect mental and emotional health) viz. *Krodha* (anger), *Chintaa* (worry) and *Bhaya* (fear)negatively affect *Hrudaya* (heart).¹³ This causes *Praanadushti* (imbalance of *Praanavaayu*) as *Hrudaya* is seat of *Praana*.¹⁴ Stress, the notorious causative factor among all, holds the topmost place due to its potentiality to cause the disease and for its prevalence in all age groups and sectors of the society. It has central influence on sympathetic efferent neurons.¹⁵ *Vaya*(age) also is a factor that influences the BP to a great extent. Senile age group is more prone and at risk of getting EH.¹⁶ This group, as told in *Ayurveda* is dominant in *Vaatadosha* that is known to cause *Dhamanikaathinya* (rigidity of blood vessels) and *Sankocha* (abnormal contraction).¹⁷ Even recent studies speak about structural thickening and degenerative changes that reduce the elasticity of blood vessels, related with age advancement.¹⁸

Charakacharya has mentioned *Hrudroga* (CVD) as an *Upadrava* (complication) of *Pittaavrut Praana* which undoubtedly is a major reason for mortality due to Hypertension.¹⁹

Having considered these three measures of diagnosis, it can be said that EH can be correlated with *Pittaavrut Praana* described in *Ayurvedic* texts.

Treatment modules of *Pittaavrut Praana*-

The treatment modules of *PittaavrutPraana* as told in *Samhitaas* are as follows²⁰-

- *Virechana / Mrudu Sramsana*
- *Ksheera*
- *Sarpi*
- *Yava*
- *Shaali*
- *Rasaayana*
- *Pittaghna and Vaataanulomana Chikitsaa*

Other actions to be looked for are-

- *Raktagatapittashamana*
- *Having action on Mana*
- *Ojavardhana*

Considering the above principles of treatment, following *Aahaareeya Dravyas* should be included in diet. *Dravyas* along with their *Rasa*, *Guna*, *Vipaaka*, *Doshakarma*, other *Karmas* and *Rogahnataa* are tabulated below-

<i>DRAVYA</i>	<i>RASA</i>	<i>GUNA</i>	<i>VIPAACA</i>	<i>DOSHAKARMA</i>	<i>KARMA</i>	<i>ROGA-GHNATAA</i>
<i>Mrudveekaa</i> ²¹	<i>Madhura Ishat Kashaaya</i>	<i>Sheeta Snigdha Guru</i>	<i>Madhura</i>	<i>Vaataanulomana Pittashaamana</i>	<i>Raktaprasaadana</i>	<i>Madaatyaya Bhrama Daahaa Moorchaa Chardi</i>
<i>Daadima</i> ²²	<i>Madhura</i>	<i>Anushna</i>	<i>Madhura</i>	<i>Tridoshaghna</i>	<i>Hrudya</i>	<i>Raktapitta</i>

	<i>Kashaaya Amla</i>	<i>Laghu Snigdha</i>		<i>Praana, Vyaana and Udaana Anulomana</i>	<i>Mastishkabalya</i>	<i>Chardi Shrama Hrudroga</i>
<i>Aamalaki</i> ²³	<i>All except Lavana specially Amla Kashaaya</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Pittashaamana Kaphashaamana</i>	<i>Rasaayana Vayasthaapana Raktaprasaadana</i>	<i>Raktapitta</i>
<i>Vrukshaamla</i> ²⁴	<i>Madhura Amla</i>	<i>Ushna Laghu Rooksha</i>	<i>Amla</i>	<i>Vaataanulomana Pittashamana Kaphashamana</i>	<i>Deepana Rochana</i>	<i>Hrudroga Daaha</i>
<i>Shaali</i> ²⁵	<i>Madhura Kashaaya Anurasa</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Vaatashamana Pittashamana Kaphashamana</i>	<i>Vrushya Mootrala</i>	<i>Pittaavrut Praana Prameha</i>
<i>Yava</i> ²⁶	<i>Madhura</i>	<i>Sheeta Sara Rooksha Guru</i>	<i>Madhura</i>	<i>Pittashamana Kaphashamana</i>	<i>Vrushya Sthairyakara</i>	<i>Pittaavrut Praana Prameha Sthaulya</i>
<i>Dugdha</i> ²⁷ (<i>Godugdha</i>)	<i>Madhura</i>	<i>Sheeta Guru Snigdha</i>	<i>Madhura</i>	<i>Vaatashamana Pittashamana Kaphakara</i>	<i>Ojasya Dhaatuvardhana Vrushya Jeevaneeya Rasaayana</i>	<i>Pittaavrut Praana Bhrama Raktapitta</i>
<i>Ghruta</i> ²⁸	<i>Madhura</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Vaatashamana Pittashamana</i>	<i>Vayasthaapana Rasaayana</i>	<i>Pittaavrut Praana</i>
<i>Palaandu</i> ²⁹	<i>Katu Madhura</i>	<i>Anushna Snigdha Guru</i>	<i>Madhura</i>	<i>Vaatashamana Naatipittala Kaphakara</i>	<i>Vrushya Balya</i>	<i>Vaatavyaadhi</i>
<i>Rasona</i> ³⁰	<i>All except Amla mainly Katu</i>	<i>Ushna Teekshna Sara Guru</i>	<i>Katu</i>	<i>Vaatashaamana Kaphashamana Pittakara</i>	<i>Rasaayana Hrudya</i>	<i>Meha Vaatavyaadhi</i>
<i>Saindhava</i> ³¹	<i>Lavana Ishat-Madhura</i>	<i>Anushna</i>	<i>Madhura</i>	<i>Vaatashamana Pittashamana Kaphashamana</i>	<i>Vrushya Hrudya Chakshushya</i>	

Table 1: Food articles and their properties

Discussion:

Taking into consideration the *Sampraapti* (pathophysiology) of *Pittaavrut Praana* and the *Sampraapti Ghatakas* (entities involved in the pathophysiology), modes of action that should be looked for are *Virechana*, *Jeevaneeya*, *Rasaayana*, *Pittaghna*, *Vaataanulomana*, *Ojaskara*, having action on *Mana* and *Praana* and *Hrudya*.

Mrudveekaa (raisins) are one among the routinely consumed dry fruits with ample of medicinal properties. With its *Madhura* and *Kashaaya Rasas*, *Sheeta Veerya* and *Guru Guna* it helps in *Pitta* and *Vaatashamana*. Owing to its *Kashaaya Rasa* it also does *Raktaprasaadana*. It has a dominance of *Prithvi* and *Aapa Mahaabhootas* as a result of which it facilitates *Malappravartana*. It does *Shukravardhana* and hence increases *Oja*. *Madaatyaya* is an aetiological factor for EH and needs to be managed. *Mrudveekaa* are said to help in *Madaatyaya* and in turn help in hypertension due to excessive alcohol consumption. *Bhrama*, *Daahaa*, *Chardi* and *Moorchaa* are found in *Pittaavrut Praana* and are addressed to by *Mrudveekaa*. Raisins are rich in potassium which is known to reduce BP and antioxidant dietary fibres which favourably alter the biochemistry of blood vessels and reduce the stiffness which in turn reduce the BP³².

Daadima (pomegranate), with *Madhura Rasa*, *Kashaaya Anurasa*, *Madhura Vipaaka* and *Laghu* and *Snigdha Guna*, helps *Shamana* of *Vaata* and *Pitta*. Due to its *Kashaaya Anurasa*, *Laghu Guna*, *Kapha shamana* is achieved. Along with having *Tridoshaghna* property, it has a unique property of *Anulomana* of *Praana* which is involved in the *Sampraapti*. It is *Hrudya* being *Amlarasaatmak* and *Hrudaya* being an important entity in the Pathology of EH and a vulnerable organ to get affected, needs to be paid attention to. It is also *Mastishkabalya* i.e. helps strengthen the brain and the related systems. This is necessary as EH poses a potential risk of stroke. *Daadima* is an ingredient of *Kharjuraadi Mantha* which is indicated in *Madaatyaya*. Hence it has an action on *Madaatyaya* which is an aetiological factor for EH. Pomegranate is polyphenol rich fruit with high antioxidant properties. It contains flavonoids such as *catechins*, tannins and ellagic acid (the most potent of all) which have tremendous healing capacity which makes pomegranate a subject of many scientific papers over last few years. Pomegranate has compounds that make it a natural angiotensin converting enzyme inhibitor (ACE inhibitor) which shows action similar to lisinopril and works by decreasing angiotensin activity in turn lowering the BP. ACE inhibition helps vasodilatation thus bringing down the BP levels. Lipid peroxidation results in cell damage due to oxidative stress and degradation of lipids in cell membranes. In a study, 90% reduction in LDL associated lipid peroxides was noticed after six months of pomegranate juice. Also, the thickness of the carotid artery reduced by 35% while the same was found to have increased by 9% in the control group. Another study showed a drop of average BP from 174 to 153 mm of Hg in one year when no reduction was seen in placebo group.³³

Aamalaki (Indian gooseberry) by its *Amla Rasa* causes *Sramsana* and *Vaata anulomana*. Owing to its *Kashaaya Rasa* it does *Raktashodhana* and *Raktagata pitas hamana* which is an important part of the pathology. Due to *Sheeta Veerya* it does *Pitta shamana* and its *Madhura paaka* helps achieve *Rasaayana Karma*. It helps efficiently excrete the *Mala* resulting as a by-product of *Dhaatu*-formation hence maintaining the optimal quality of the *Dhaatus*. This increases *Oja* which is the essence of the process. It also does *Vayasthaapana* and advancing age is a predisposing cause in the pathology of EH. It also is an ingredient of *Kharjuraadi Mantha* which is indicated in *Madaatyaya*. It is a rich source of vitamin C which, according to some scientists from Johns Hopkins Medicine, helps reduce the BP. An average consumption of 500 mg of vitamin C daily has proven to reduce BP by 3.84 mm of Hg in short term in normotensives. In hypertensive patients, the drop in SBP was by 5 mm and in DBP was 1.7 mm.³⁴ 100 g of fresh pulp of the fruit contains about 720 mg of vitamin C and same amount of pressed juice contains about 900 mg, which are optimum levels for BP control. Apart from vitamin C, it contains chromium, zinc and copper and polyphenols which play vital role in BP management.³⁵

Vrukshaamla (garcinia or *kokum*) is a popular food among functional foods. It has *Madhura* and *Amla Rasa* and *Amla Vipaaka*. All these *Rasas* are *Vaatashaamaka*. Hence *Vrukshaamla*, by these *Rasas* and *Ushna Veerya*, does *Vaatashamana*. *Madhura Rasa* is dominant in *Prithvi* and *Aapa Mahaabhoota*. These together cause *Sarana* (excreting after liquification) of *Pitta* hence *Pittashamana* is achieved. Symptom of *Pittavrut Praana* viz. *Daaha* is also addressed to by *Vrukshaamla*. It is one among the ingredients of *Kharjuraadi Mantha*. Recent studies indicate that oxidative stress is key player in the pathogenesis of hypertension. Hence it can be hypothesized that antioxidants should have beneficial effects on hypertension as reduction in oxidative stress is directly proportional to the blood pressure. *Garciniaindica* is rich in antioxidants viz. *Garcinol*, *anthocyanins*. They prevent cell damage and strengthen the blood vessels. Flavonoids, which also show antioxidant activity, are polyphenols which stimulate the formation of vasoprotective factor such as nitric oxide and endothelium derived

hyperpolarizing factor that promote vasodilatation, inhibit platelet aggregation and can also improve vascular smooth muscle function.³⁶

Shaali (rice) is as told by our texts, a *Pathya Dravya* in most of the diseases. It is indicated also in *Pittaavrut Praana*. It has *Madhura Rasa* with *Kashaaya Anurasa*, *Sheeta Veerya* and *Madhura Vipaaka*. These help is *Vaatashamana* and *Pittashamana*. It has *Vrushya* action which indicates its action on *Oja*. Also it is *Mootrala* which helps excrete excess sodium from the body and thus help lower BP. Researchers say brown rice (unpolished rice) contains essential compounds like potassium, magnesium, selenium, phosphorus, lignans, phytoestrogen and phytic acid which are lost when it is polished. These are proven to improve BP levels. Magnesium helps dilate the vessels and lower BP. Deficiency of magnesium causes decrease in serum potassium although intake of potassium is adequate. Its deficiency also hinders with metabolism of calcium. It causes increase in calcium in smooth muscle cells and causes perpetual vasoconstriction. Selenium has proven to prevent heart diseases. Among these phytoestrogens have especially helped in normotensive males and post-menopausal women. Another compound, oligosaccharides, helps inhibit protein angiotensin II. This protein is known to raise the BP and degrades the health of heart. Hence inhibition of this protein lowers BP and offers protection to arteries and heart and also prevents atherosclerosis. These effects, however, vanish with polishing and the whole grain is left with only endosperm content.³⁷⁻⁴¹

Yava (barley) is one *Dravya* which although has not been asked to consume on daily basis, has appeared in some exceptional conditions. One such condition is *Pittaavrut Praana* wherein its utility can be readily established. Its *Pittashaamak* property is imparted by *Madhura Rasa* and *Vipaaka*, *Sheeta Veerya* and *Rooksha Guna*. It is indicated also in *Prameha* and *Sthaulya* and the fact that Diabetes and obesity have direct relation with hypertension is well known. Barley is rich in potassium, optimum levels of which is as essential as lowering the sodium levels. This is to maintain the sodium to potassium ratio. It also contains calcium and magnesium which have found to reduce the BP level. These nutrients are present in the bran and germ layers and polishing of the grains leads to their loss. A study published in the Journal of American Dietetic Association in 2006 states that, "In a healthful diet, increasing whole grains food, whether high in soluble or insoluble fibre, can reduce blood pressure and may help to control weight".⁴²

Ksheerapaana (drinking milk) is advised in *Pittaavrut Praana*. *Dugdha* (milk) does *Pitta* and *Vaatashamana* by *Madhura Rasa*, *Snigdha & Guru Gunas* and *Madhura Vipaaka*. *Sheeta Veerya* helps in *Pittashamana*. It shows *Ojaskara*, *Dhaatuvardhana*, *Jeevaneeya*, *Rasaayana Karmas* which are all required for treatment of *Pittaavrut Praana*. Presence of all these qualities in one food makes it an ideal food for EH. Milk contains high biological value protein and essential amino acids. These majorly are casein and whey protein. Casein facilitates calcium and phosphate absorption in the small intestine and is the main substrate for production of bioactive peptides. Certain of these bioactive peptides known as lactotripeptides have been studied in detail which have proven to inhibit ACE enzyme in-vitro hence its effect on BP can be inferred. The major role is played by potassium which is present in 350 mg amount per cup. It is also a main source of phosphorous, magnesium, vitamins A, E and trace elements iodine, selenium and zinc. These elements, individually or together, helps keep BP within healthy range.⁴³

Ghrutapaana (consumption of *ghee*) is also indicated in *Pittaavrut Praana*. *Ghee* (clarified butter) is a dairy product which is obtained at the end of many *Sanskaara* (processes) like *Manthana* (churning) and *Agni* (heating). These make it easy to be absorbed and is the essence of *Dugdha* just like *Oja*. Hence it increases *Oja* and does *Rasaayana Karma*. It does

Vaata and *Pittashamana* by *Madhura Rasa & Vipaaka* and *Sheeta & Snigdha Gunas*. It does *Vayasthaapana* i.e. slows down the ageing process. Advanced age is an unavoidable physiological change that poses a risk to EH. However no researches indicate its efficacy in lowering BP whatsoever.

Palaandu (onion) is routinely used in Indian dishes. It has the potential to benefit in *Pittaavrut Praana* owing to the following properties. It does *Vaatashamana* due to *Madhura Rasa & Vipaaka* and *Guru Guna*. Although it also has *Katu Rasa*, it doesn't cause *Pittavardhana* as it is *Anushna* (neither hot nor cold in potency). It exhibits *Vrushya Karma* which concludes its positive effect on *Oja*. Researchers have confirmed presence of a chemical named oligomeric proanthocyanidins (OPCS) in abundant quantity in onions which help in free-radical scavenging and helps in healthy circulation, improving vein health and lowering blood pressure. OPC quercetin is also proven to be a natural supplement to lower BP. Onions also contains sulphur compounds in some amount. However, onions in raw form only possess this quality. Cooked ones don't show the same effect.⁴⁴

Rasona (garlic) has *Ushna Veerya, Katu Vipaaka* and *Teekshna Guna*. With these qualities, it does *Vaatashamana* and *Pittavardhana*. Hence it is to be treated with buttermilk to reduce these qualities to tolerable levels. It is an excellent *Vaatashaamaka* and has *Hrudya* property i.e. it is beneficial for cardiac health which is one among the three targets of hypertension. It is also indicated in *Meha* and studies have proven the direct relationship between type II diabetes and hypertension. Garlic clove is a multivitamin which is full of nutrients like 33 sulphur compounds, 17 amino acids, antioxidants viz. Germanium and selenium and many other minerals and vitamins along with a substance named allicin, which impart garlic its characteristic odour and blood pressure reducing pharmacological property. Garlic reduces fibrinogen and inhibits platelet aggregation which helps thin the blood, an action similar to that of aspirin or thrombolytic drugs. This prevents formation of clots which render one prone to CVD and CVA. Garlic prevents digestive system from converting fat to cholesterol, which is responsible for plaque formation within the lumen of blood vessels leading to atherosclerosis. Some studies suggest it causes vasodilatation and reduces peripheral vascular resistance resulting in lowering of blood pressure. The antioxidants content in it also helps benefit in hypertension. Sulphur has also proven to lower BP and prevent its progression, which is present in garlic in large proportions. Sulphur is however lost to some extent while cooking. But garlic doesn't lose all its anti-hypertensive property on cooking, unlike onion.⁴⁵⁻⁴⁶

Salt, as known to everyone, contains sodium and is one among the major culprits of EH. However, *Saindhava*, which has *Ishat Madhura Rasa* along with *Lavana* and is not *Ushna*, does not cause harm like routinely used table salt. It is *Hrudya* and *Vrushya* (which means it has positive effect on *Dhaatus*). It has, to addition to sodium chloride (98% NaCl), some elements which are beneficial in EH. They are potassium, magnesium, calcium and sulphur. Also it is saltier than table salt. Hence fewer amounts is sufficient which results in lesser sodium intake. Acidity, which is often linked with high BP, is also checked by *Saindhava* as it is acidic in nature.⁴⁷⁻⁴⁸

Conclusion:

The disease that is currently haunting the medical science, Essential Hypertension, can be potentially controlled and its complications be prevented or kept minimal by incorporation of readily available and routinely consumed dietary components. Learning of Essential HTN through *Ayurvedic* perspective has helped to throw light upon such foods. Most of these are proven effective in HTN by modern methods of research. These are *Mrudveekaa* (raisins),

Daadima (pomegranate), *Vrukshaamla* (*kokum*), *Aamalaki* (Indian gooseberry), *Dugdha* (milk), *Shaali* (rice), *Yava* (barley), *Palaandu* (onion), *Rasona* (garlic) and *Saindhava* (Himalayan rock salt). However certain *Dravyas* still need to be learnt more about for more evidence based dietary advice. One such food item is *Ghruta* (*ghee*/clarified butter)

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