# THE REVIEW OF THE ROLE OF SHREEDHANYAM IN PREVENTION AND MANAGEMENT OF LIFESTYLE DISORDER

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#### **ABSTRACT:**

Lifestyle disorders like CVD, diabetes, and obesity are increasing day by day. Lifestyle disorders are deadly and cause morbidity to many. Research shows that sudden and tremendous change in lifestyle is the main cause. According to Ayurveda, the *Mithya Aahar Vihar* is one of the causes of spreading the toxins or *Gara Visha* in the body. Some decades before, lifestyle disorders were low in statistical data. If we try to find out the lifestyle including *Aahar- Vihar* in the past, the vast difference can be observed. *Vihar* was good enough, like good sleeping habits, physical work, and a stress-free life. *Aahar* included only fresh homemade food, and farming was without chemicals. The diet was rich in grains, mainly millet. Millets are described in *Samhitas* as *Shreedhanya* and are appreciated by *Acharyas*.

KEY WORDS:- Millets, Lifestyle disorder, Gar visha, Trundhanya, Shreedhanya

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# INTRODUCTION

The statistics about the lifestyle disorders are not satisfactory. The lifestyle disorders are not only deadly but also giving morbidity to many. There is steep rise in non- communicable diseases since some past decades.1To create awareness is the necessity and to change the lifestyle is priority. Changes in routine and food habits should be sought.

On the same note, the United Nations General Assembly on the 75th session have declared 2023 the InternationI Year of Millets.2 Indian government is also observing this year as the InternationI Year of Millets .India's Finance Minister Nirmala Sitharaman announced the Union Budget in February 2023 where she referred the millets as 'Shri anna" or it is synonym of the best of all grains. Millets are often referred as the 'poor man's grain' and known as a neglected as well as underutilised crop. The government of India has funded for the Indian Institute of Millet Research (IIMR), Hyderabad. At many levels the awareness programmes about the millets are being held.3The rationale behind calling millets as Shri anna was that the name is picked from Karnataka where the millets are called 'Siri Dhanya', and people in Karnataka knows the importance of the millets.4

The Indian popular millets are Jowar, Bajra, Ragi, Sama, Kangni, Cheena, Kodon, Kutki, and Kuttu which are prevalent in various regions of India, and were part of the lifestyle for centuries. It was staple food of India.

When the Green Revolution in India was implemented by government, the rice and wheat was cultivated abundantly and supplied to poor. After that the wheat and rice became staple food slowly.

Meanwhile, the lifestyle disorders started to grow slowly and proved as silent killers. CVD, hypertension, stroke, cancers, diabetes, obesity, infertility are some lifestyle disorders and are reversible to some extent if some modifications are made in routine and food habits.

In past, food was mainly millets, and people were rarely suffering from non -communicable diseases. But due to gradual ignorance, millet was retreated from daily food, and was known as the 'lost crop'. To revive this millet crop, researches were made on varieties of millets. The studies shows that the nutritive values of different varieties were different and it's effects on health was very positive, thus researches were proved as very promising and encouraging.

Apart from health problems due to diet changes, the other current concerns are quality food production, sudden climatic changes, and water availability, increasing population and malnutrition, which developed interest regarding millet. This has been proved good opportunity for farmers, nutritionists, and food industries to carry on researches in order to know more about the nutritional values of millet.

**NEED OF THE STUDY** – There is need to make more and more researches to know about millets, so it's wise inclusion in our food can prevent and manage lifestyle disorder.

#### **AIM**

To review the role of *Shreedhanyam* in prevention and management of lifestyle disorder.

#### **OBJECTIVES**

1. To study the *samhitokt shreedhanyam wrt* to millets.

- 2. To review lifestyle disorder and its causes
- 3. To correlate *Gar visha* and the toxins created by present day food habits.

#### MATERIAL AND METHOD

The textbooks were reviewed thoroughly. Research articles and online data were critically reviewed.

#### REVIEW OF LITERATURE

# Samhitokt Shreedhanyam and millets.

In Samhitas millets are described under the various vargas by Acharyas. Vagbhatacharya5 had mentioned the millets under Trindhanya in **Ashtang Hridaya sutrasthana** while Sushrutachahrya6 described it as Kudhanyavarga in **Annapanvidhi Adhyaya** and in Bhavprakash Nighantu 7one can find it as **Dhanya varga.** Charakacharya8 described under dhanya varga in Annapanvidhi Adhyay.

We can summerise these varga and the Dhanyam as below:

#### Ashtanga Hridaya

Trina Dhanya:

Kangu, Kodrava, Nivara, Syamaka, Priyangu, Yava, Godhuma, Nandimukhi

# **Sushrut Samhita**

# Kudhanya Varga: Jeevani Darshan

# International Journal of Ayurveda & Yoga

Koradusaka, Syamaka, Nivara, Santanu, Varaka, Uddhalaka, Priyangu,

Madhulika, Nandimukhi, Kuruvinda, Gavedhuka, Sara, Baruka, Todaparni, Mukundaka, Venuyava

# Bhavaprakasha

# Dhanya varga:

Kangu, Cinaka, Syamaka, Kodrava, Caruka, Vamsa yava, Kusumbha beeja, Gavedhuka, Nivara, Yavanala,

Kaiyadeva Nighantu - Dhanya varga

Dhanvantari Nighantu - Suvarnaadi varga

Raja Nighantu - Shalyaadi varga

Shodala Nighantu - Trinadhanya varga

#### Dhanya varga: Gun -Karma

According to Kaiyadev nighantu and Bhavprakash , all trundhanya, kshudradhanya and kudhanya are:

Laghu, ushna, katu pak, kashay madhur in rasa,lekhan,ruksha, kledshoshan,vatkrut, baddhavitakam,pitta-rakta-kaphapaham.

Shreedhanyam, Trundhanya, kudhanya, Kshudradhanya are nothing but the millets. Some of the samhitokta millets are available today also. They are as effective as Acharyas had been described in samhitas. Let's see some important millets, that are described in samhita also.

# 1. Madhulika / Ragi/Finger Millet

Botanical Name: Eleusine coracana, Family-Poaceae

In Susruta samhita Madhulika have been explained. It is well known by name Ragi. It is Finger millet. Accorging to samhita it is madhura in rasa, sheeta veerya and has snigdha guna. Due to madhura rasa it acts as brihaniya, balya and due to sheeta veerya it reduces the rakta, pittaj ailments.

The protein in finger millet is as superior as it holds vital amino acids such as lysine, threonine, and valine.9 Finger millets has highest amount of calcium (344mg%) and potassium(408%). So strengthens the bones. It is rich in dietary fibres, minerals, vitamins as well as amino acids hence it is best nutrition for all ages. Studies shows that finger millets are capable of lowering down the blood glucose because of slow release of sugars in blood. High level of fibre keep the gut healthy, reduces lipid level, has anti-ulcerative as well as wound healing properties.10

## 2.Kodrava /Kodo Millet/Rice grass

Botanical name: Paspalum scrobiculatum, Family-Poaceae

It is known as kodo, kodra. While in English it is known as rice grass, ditch millet, cow grass.

According to Ashtanga Hridaya, Kodrava is sheeta veerya,laghu guna, and have lekhana property. Hence used as langhana. It increases vata, pacifies kapha- pitta, causes constipation.

It is antitoxic in property. Minimal incidences of diabetes has been found in the region which consumes kodo millet.

It is repository of nutrients with 11% protein, rich source of fibre, 66.6gms of carbohydrates, 353 kcal, 3.6 gms of fat and also calcium, iron.11

Phenolics like alpha glucosidase in Kodo millet, partly inhibits the hydrolysis of carbohydrates thus reduces the hyperglycemia. As it is antioxidant it prevents the metabolic syndrome.12 Also minimises the risk of cardiovascular diseases .The Phenolics in Kodo is efficient in preventing cancer initiation.13

# 3.Kangu/Priyangu /Foxtail millet

Botanical name: Setaria italica, Family - Gramineae

Acharya Vaghbata, Susrutha, Bhavamishra have given the references about Priyangu or kakkangu. It is madhur and kashay in rasa, ruksha and guru in guna, ruchya, sheet veerya. It aggravates vata and pacifies kapha. Bhagna sandhanak, brihaniya, and dahaghna. Rajnighantu included it in shalyadi varga. Krushna, rakta, sita, pita are four varieties of kangu are described.

The digestible protein in foxtail millet is higher than that of rice and wheat. Out of eight essential amino acids, seven amino acids which cannot be synthesized by the human body, are higher in foxtail millet. It is also rich in protein (14–16%), fat (6–8%), iron, zinc,calcium and magnesium. 14 It heals fractures, have nourishing property.

As compared with rice, it contains 2.5 times edible fibre which keeps the intestine and stomach healthy.15

# 4. Shyamaka/ Sawa /Barnyard millet

Botanical name: Echinochloa esculenta, Family- Gramineae

According to Ashtanga hridaya, Shyamaka or sawa is madhur and kashay in rasa, laghu ruksha, snighdha and sheeta veerya, laghu guna. It increases Vata and balances kapha and pitta. It is sangrahi and brihaniya.

Barnyard millet stands superior in major and minor millets in nutritive value. Protien 7.7g, carbohydrate 67g, crude fibre 7.6mg, calcium 17mg, iron .3 mg per 100gm.16 It is gluten free, and resistant starch in it lowers the blood glucose, cholesterol, and triglyceride levels,17hence good for cardiovascular diseases. Also it lowers the glycemic index of patients of type 2 diabetes.18

# 5.Chinaka /Proso millet/ Indian millet

Botanical Name - Panicum miliaceum, Family - Gramineae

In Bhavprakash, Chinaka is mentioned, and as variety of kangu. And it is said that it has the similar properties as kangu.

Proso millet is gluten free crop and a good source of energy. It has protein 8.3g, carbohydrate 65.9 g, crude fibre 9 mg, calcium 27gm, iron 0.5mg. Studies shows this millet contains high iron and protein content compared to wheat or rice.

Proso millet is good source of Vitamin B3 (niacin) and hence effective in Pellagra. 19

Traditionally it is widely used while recovering from illness and post partum.

# VERNACULAR NAMES OF MILLETS

English	Sorghum	Pearl Millet	Finger millet	Little millet	Kodo millet	Foxtail/ Italian millet	Barnyard millet	Proso millet
Hindi	Jowar	Bajra	Mandua	Kutki	Kodon	Kangni, Kakum	Sanwa, Jhangon	Barre
Sanskrit	-	-	Nandimukhi, Madhuli	-	Kodara	Kanguni	Shyama	Chiná
Kannada	Jola	Sajjai	Ragi	Same	Harka	Navane	Oodalu	Baragu
Tamil	Cholam	Kamboo	Kelvaragu	Samai	Varagu	Tenai	Kuthiravaali	Panivaragu
Telugu	Jonna	Sajjalu	Ragulu	Samalu	Arikelu, Arika	Korra, Korralu	Udalu, Kodisama	Varigulu, Varagalu
Malayalam	Cholam	Kamboo	Moothari	Chama	Varagu	Thina	-	Panivaragu
Marathi	Jcwari	Bajri	Nachni	Sava	Kodra	Kang, Rala	Shamul	Vari
Gujarati	Juar	Bajri	Nagli, Bavto	Gajro, Kuri	Kodra	Kang	Sama	Cheno
Bengali	Juar	Bajra	Mandua	Kangani	Kodo	Kaon	Shamula	Cheena
Punjabi	-	Bajra	Mandhuka, Mandhal	Swank	Kodra	Kangni	Swank	Cheena

Nutritional and Health Benefits of Millets + 13



By Nutritional and Health Benefits of Millets B. Dayakar Rao K. Bhaskarachary G.D Arlene Christina G. Sudha Devi Vilas, A. Tonapi ICAR – INDIAN INSTITUTE OF MILLETS RESEARCH (IIMR)

#### LIFESTYLE DISORDER AND ITS CAUSES

Lifestyle disorders -Recent statistics about the mortality and morbidity due to lifestyle disorders are depressing. It is the subject of concern to be sort out. The prevalence of non- communicable diseases like cardiovascular diseases, cancer, obesity, diabetes, celiac diseases are seen if compared to past decades. Every year the non-communicable diseases are responsible for the death of 41million people, equivalent to 74% of all deaths globally. If we split the data according to the diseases, cardiovascular diseases deaths are 17.9 million, Cancers 9.3 million, Chronic respiratory diseases 4.1million, and diabetes 2.0 million.20

**Responsible causes** -What should be the common responsible cause for worldwide problem? It is well accepted that, these diseases are because of the changed lifestyle. The lifestyle of common man has tremendously changed as never before. The changes are in food habits, sleep pattern coupled by mental and physical stress, sedentary work, drug addictions etc.

The changed food habits- To focus on the causes behind the lifestyle disorders, let's turn the pointer on the changed food habits and it's effect on health. There are lot of changes in dietary patterns as compared to the past. It may be due to the availability of food, affordability of food, quality of food, non-hygienic food, work pattern, changed living area etc. The transitional changes in food habits and fast changing lifestyle impacts on health negatively. The home -made food is widely replaced by fast food and may be called as synonym of junk food, which was first introduced by western countries,

and popularised worldwide. Which has changed food industry today.21 The junk food includes many types of fast foods, processed foods, packed foods, soft drinks and so on. Present generation is more attracted towards fast food as it pacifies taste buds and easily available. It contributes to the main risk factor of nutrition as it is low quality diet, higher calorie, more and bad quality of fat and poor micronutrients.22 These diet leads to weight gain, abdominal fat accumulation, impaired insulin and glucose homeostasis, lipid disorders, systemic inflammation and oxidative stress.23

#### **GARA VISHA**

In Agad tantra ,naisargic visha (Sthavara, Jangama) or natural toxins and kritrim visha or artificial toxins are explained elaborately by samhitakaras.

According to Vagbhatacharya, Kritrim visha is gara visha.24 And Gara visha is prepared artificially by mixture of various toxic or non-toxic substances.

According to Charakacharya also gara visha is sanyogaj visha, which exerts toxic effect after interval of sometime and as such does not kill the victim instantly. But it is responsible for many diseases in future. As it is toxin, it's harmful after effects are seen on body.

Charakacharya had given the symptoms of gar visha in chikitsa sthan 23 adhyaya.25 These are as follows:

Pallor, leanness, frailness of digestive capacity, tachycardia, abdominal distension, oedema in extremities, disorders of abdomen and duodenum, tuberculosis, phantom tumors, emaciation, pyrexia and some psychiatric symptoms.

According to modern medicine, poison is a substance which when administered, inhaled or ingested capable of acting deleteriously on human body and produces ill health.26 Poison may be synthetic, mineral, vegetable or of animal origin.

This definition is applicable for gara visha also. Where gara word is derived from 'gru' dhatu, which means swallowing. Out of several methods of administration, the first one is Anna (food), which is very easy to get adulterated with non-poisonous or poisonous substances and produce hazardous effects.27 The changing food culture is itself a slow poison i.e. gara visha. Where junk food, fast food, frozen food, street food, is taking place in everyone's place, in everybody's plate. And this food is served with so many food additives such as colouring agents, preservatives, sweeteners, and stabilisers etc. As these substances are used continuously in market food since many years, it's effect can be seen as a toxin or as chronic poisoning, damaging the organs internally, silently. If consumed persistently for prolong period, it is life threatening.

**Visha guna-** There are ten guna of visha according to Charakacharya, Sushrutacharya and Vagbhatacharya.

These are as laghu, ruksha, aashu, vishad, vyavayi, tikshna, vikasi,sukshma, ushna and anirdeshya rasa (Charakacharya)28 and also apaki instead of anirdeshya rasa.(Sushrutacharya 29 and Vagbhatacharya.) Exactly opposite are guna of Ojas, so visha is capable of destroying Ojas and thus the life.

Likewise the properties of visha and trundhanya are opposite or different. Thus millets can nullify the effects of gara visha .

# Comparision between visha and trundhanya guna

Visha	Trundhanya			
1 Lochy (licht)	1 Laghu			
1. Laghu (light)	1. Laghu			
2. Ruksha (rough)	2. Ruksha			
3. Aashu (rapidly spreading)	3. Prasad			
4. Vishad (non -slimy)	4.Picchil			
5. Vyavayi (quickly absorbing)	5.Sthir			
6.Tikshna (sharp)	6.Mrudu			
7.Vikasi (depressing)	7. Shlakshna			
8.Sukshma (subtle)	8.Bahal			
9.Ushna (hot)	9. Sheet			
10.Anirdeshya rasa (disguising taste)	10. Madhur, Kashay			
11. Apaki (non-digesting)	11. Katu vipak			

# Sanjeevani Darshan

# MILLETS INTRODUCTION nal Journal of Ayurveda & Yoga

Millets are small-seeded grasses of a highly varied group. Which is widely grown across the world for fodder and human food.30 They are important crops of Asian and African semiarid tropics, specially in India, Mali, Nigeria, and Niger.31

Millets are small-grained, annual, warm-weather crops of grass family. They are highly resistant to droughts and other extreme weather conditions. Millets and other major cereals have a similar nutrient content. This crop is popular due to its high productivity and short growing season. The various species of millets are not closely related. The millets belong to the family Poaceae (the grasses) but may have different tribes or subfamilies.

The major millet is sorghum i.e. Jowar. The annual harvest of sorghum is twice as of other millets.32 Out of these pearl millet or Bajara are the most common. Pearl millet and sorghum are important crops in India and parts of Africa.

Pearl millet is the sixth highest producing crop, after maize, wheat, rice, barley, and sorghum.33 It provides good nutrition and sustainable income to small-scale farmers.34

Finger millet, proso millet, and foxtail millet are also important millet crop species. Finger millet

grows better in colder regions with slightly more rain.<sup>35</sup> In rural communities of East and Central Africa, finger millet is an important crop as it contributes significantly to nutritional status of people.

#### **NUTRITIVE VALUES OF MILLETS**

Millets are nutritionally as good as major cereals and proven as a good source of protein, carbohydrates, micronutrients and phytochemicals. Every type of millet has a different nutrient profile, most are rich in protein, good source of minerals such as calcium, iron and zinc also vitamin B6, niacin and folic acid. The highest calcium value is present is finger millet with 344 mg/100g among all the cereals, rich in phytates 0.48g/100g, polyphenols, tannins 0.61% (Thompson, 1993). Due to phenolic compounds present in millets it removes the free radicals, thus reduces oxidative stress. It has anti-cancer properties, anti-prolific effects on cancer cell line. It inhibit DNA damage and induce the production of phase-2 detoxifying enzymes. The prevention of the oxidation of low-density lipoproteins by millets reduces the occurrence of hypertension.36 Apart from these benefits, millets contain phosphorus, which is important for energy production and storage, magnesium which enhances nutrient delivery and increases insulin sensitivity. Lignans in millet protect us against breast cancer and cardio-vascular diseases.37

# **Carbohydrates**

The millet contains about 65% carbohydrate, which is in the form of non-starchy polysaccharides and dietary fibre which help in prevention of constipation, lowering of blood cholesterol and slow release of glucose to the blood stream during digestion. Lower incidence of cardiovascular diseases, duodenal ulcer and hyperglycemia (diabetes) are reported among regular millet consumers. Millets vary in carbohydrates as proportion of amylose and amylopectin content vary from 16-28% and 72-84%, respectively. As millts are gluten free,can be used for celiac disease patients. Millets lowers blood glucose and glycosylated haemoglobin, thus lowering the glycemic index, ultimately reduces the risk of diabetic mellitus.

### **Carbohydrate Digestibility**

Starch is classified as rapidly digestible starch (RDS), slowly digestible starch (SDS), and resistant starch (RS), depending on the rate and extent of digestion (Englyst et al 1992). Nutritional properties of SDS are very important for the treatment and prevention of various diseases. Prolonged digestion and absorption of carbohydrates are favourable for metabolic disorders such as diabetes and hyperlipidemia (Asp 1994; Wursch 1994). Cooked millet flours had lower starch digestibility (15–25%) than normal rice, wheat, maize flour, regardless of endosperm type or starch present in it.

If the millet flour is pepsin- pretreated for cooking, suggests that protein plays a large role in its low starch digestibility (Genyi & Bruce, 1998).

# **Dietary Fiber**

Dietary fibre components have the swelling properties, and hence thus by increasing transit time of food in the small intestine. This increase in transit time reduces the rate of release of glucose and its absorption, thus plays vital role in the management of type 2 diabetes. Dietary fibre components are also involved in binding the bile salts, thereby increases cholesterol excretion from the body and thus reducing it's blood levels, and food toxins in the gut also reduce their toxicity. The other adverse nutritional effects are by binding dietary calcium, magnesium, zinc and iron, thereby reducing their bioavailability. Dietary fibre exerts its beneficial effects by undergoing fermentation in

the large intestine and produces short-chain fatty acids such as butyrate, propionate and acetate. Butyrate plays key role in regeneration of colon mucosal cells thus reduces the risk of colon cancer

as well as inflammatory bowel disease. The short-chain fatty acids are absorbed (propionate and acetate) into splenic circulation and transported to the liver where they inhibit cholesterol synthesis by hepatocytes and also glucose release from the liver, thus contributing partly in the hypocholesterolemic and hypoglycaemic effects. The soluble fibres gets completely fermented, the insoluble fibres are partially fermented (Narasinga Rao, BS, 2003).

# Fatty Acid (Lipids)

Fatty acids are relatively low in in quantity in millets. Most of the lipids are located in the scutellar area of the germ. Thus, lipid content is significantly reduced when the germ is removed during decortication or degermination.

#### **Protein**

Agronomic conditions and genotype of the protein content in millets vary due to Millet proteins are located in the endosperm (80%), germ (16%) and pericarp (3%) (Taylor & Schussler, 1986). Protein quality of millet in terms of amino acid profile is poor as compared to other cereals. Lysine, an essential amino acid is low in millets while it is rich in albumins and globulins. T

The endosperm contains (Nutritional and Health Benefits of Millets F 39) the kafirins and glutelins.

# **Phytochemicals**

Millets contains various phytochemicals such as tannins, phenolic acids, anthocyanins, phytosterols and pinacosanols. All millets specially sorghum shows high antioxidant property in vitro as compared to other cereals and fruits (Awika & Rooney, 2004).

# Phenolic Acids

Phenolic compounds in millets are divided into major categories: phenolic acids, tannins and flavonoids. All millets contains phenolic acids, which are present in the pericarp, testa, aleurone layer and endosperm (Hahn et al, 1984; McDonough et al, 1986)

The increased demand for antioxidant and nutraceutical foods to prevent oxidative stress as it is responsible for the development of chronic diseases such as cardiovascular, neurological, cancer, diabetes and hypocholesterolemia known as lifestyle disorders. (Grundy, 2004; Wu et al, 2004).

#### MILLET'S BENEFITS OVER NON- COMMUNICABLE DISEASES

#### 1 Cardiovascular Diseases

Millets help in reducing blood pressure and risk of heart strokes especially in atherosclerosis as it is rich sorce of magnesium. The potassium present in millets keeps the blood pressure low by acting as a vasodilator and help to reduce cardiovascular risk. The plant lignans present in millets can get converted into animal lignans in presence of microflora in digestive system and thus prevent certain cancers and heart disease. The high fiber loweers the cholesterol level by eliminating LDL from the blood and increases

the effects of HDL.

#### 2 Diabetes Mellitus

Finger millet, sorghum have been proved to lower the glycemic response because of high fiber content. Sorghum contains slow digestible starch (SDS), which prolongs digestion as well as absorption of carbohydrates in intestine. This SDS is beneficial for metabolic disorders such as

diabetes and hyperlipidemia (Asp, 1994; Wursch, 1997). The fiber, magnesium, vitamin -E, phenolic compounds and tannins present in foods reduces the risk of diabetes as they slower the sudden increase of blood glucose and insulin levels (Montonen et al., 2003). Pearl millets also increase insulin sensitivity and lower the level of triglycerides.

#### **3 Gastrointestinal Disorders**

Fiber content in millets is beneficial for constipation, intestinal gas, bloating and abdominal cramping. An immune mediated enteropathic disease known as celiac disease for which ingestion of gluten is responsible. (Catassi and Fasano, 2008).

### **4 Anti-oxidant Properties**

Antioxidants in the millest are effective in neutralizing the free radicals, which can cause cancer and clear other toxins from kidney and liver. Quercetin, cucurmin, ellagic acid and various other beneficial catechins clear the system by promoting proper excretion of foreign agents and toxins and by neutralizing enzymatic activity.(Tsao R, 2010).

#### **RESULT**

Samhitokt Shridhanya or Trundhanya are elaborately described with ras ,veerya vipak and gunkarma. Collectively which are madhur rasatmak, sheet veerya , laghu,ruksha and balya ,bruhaniya, sangrahi, kledshoshak, kapha pitta har, vatkrut and some are asthisandhankar.

The properties or guna of visha and Ojas Exactly opposite. Visha is capable of destroying Ojas and thus the life. Likewise the properties of visha and trundhanya are opposite or different. Thus millets can nullify the effects of gara visha if it is included in our diet regularly.

According to the researches, the varieties of millets contains various minerals, vitamins, high proteins, carbohydrates, low fats and high fibre content. It has low glycemic index ,anti cancer and anti oxidant properties.

#### **CONCLUSION**

After reviewing the data thoroughly, the conclusions can be drawn as below,

Shridhanya or Trundhanya are good in all aspects, considering ras, veerya, vipak and gun- karma. Hence it can be or must be included in our diet.

As properties of millets are opposite or different from *visha guna*, millets can effectively nullify the *gara visha*. And thus can prevent the effects of *gara visha*.

The gara visha created by bad food habits can lead to the lifestyle disorders which can be prevented and managed by the continuous inclusion of Shridhanya in meal.

Millets itself are complete food, which contains carbohydrate, protein, vitamins, minerals, fibre etc., so it will prove as a best nutritive food for all ages.

As stated above the millets can prevent and manage lifestyle disorders like CVD, hypertension, diabetes, obesity, cancer, celiac diseases etc.as it has low glycemic index, anti cancer and anti oxidant properties, thus will help to eliminate *gara visha* from body.

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