

PUREESHA JANAKA DRAVYAS: THE PARAMOUNT IMPORTANCE

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Received on: 13/07/2020

Revised on: 03/08/2020

Accepted on: 24/08/2020

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ABSTRACT

Lifestyle of humans has improved substantially in this modernized world. Technology has set easy access to almost everything under our fingers, but has led to reduced physical activity leading to increased incidence of lifestyle related disorders. Recent trends have shown people taking high extent of calories, Junk food and Consumption of fibers in the diet has reduced. Further level of stress has increased both at personal and professional life. All these factors are having ill effects on every organ system of body. Due to these lifestyle changes gastrointestinal symptoms like constipation, heartburn, abdominal discomfort & diarrhea are frequently encountered in clinical practice. Constipation is a common prevalent problem in general population with prevalence 2-28% which is associated with significantly impaired quality of life and psychological distress, as well as increased health care costs and impaired work productivity. Different classes of laxatives have various limitations in one or another form. These *dravya* add soluble fiber to the stool causing the stools to absorb more water thereby creating larger, softer stools. So here an effort is made in understanding the *dravya* which help in increase the bulk of stool and easy evacuation of bowel as mentioned in *Ayurveda (Pureesha Janaka Dravyas)*.

KEYWORDS: *Pureesha Janaka Dravyas*, Fibers, Bulk forming laxatives, Quality of life, Constipation.

INTRODUCTION

An individual is said to be *Swastha* whose *dosha agni dhatu* and *mala* are in state of equilibrium along with mind soul senses full of bliss.^[1] While WHO defines Health as the State of complete physical mental and social well being and not merely the absence of disease or infirmity.^[2] Only *Ayurveda* classics have given equal importance to *mala* while explaining the *Swastha* definition. '*pureesham upasthambham vayu agni dhaaranascha* ||^[3]

Agni in *Ayurveda* has a significant role to maintain body homeostasis, body functioning, metabolism of the body and *Vayu* is the Prime among the *Tridoshas* as said by *Acharya susruta*; *Vayu* and *Agni* is regulated by *Pureesha*. Here in this article an attempt is made to develop the concept of *Pureesha* along with its importance.

Meaning of *Purisha* is *Malinabhava* (dirty thing) or *Tyajyatva* (waste) i.e it should be thrown out of body. *Purisha* and *Mutra* are *Mala* of *Anna* (food). After *Sara-Kitta Vibhajana* (segregation of useful and waste part), *Sara Bhaga* (useful part) becomes *Rasa* (entity of body) and *Kitta Bhaga* (waste part) becomes *Mala*.^[4] *Sharira Poshana* (nourishment of body) takes place from *Sara Bhaga*. *Kitta Bhaga* does *Poshana* (nourishment) of

Sweda (sweat), *Mutra* (urine), *Purisha* (feces), *Vata*, *Pitta*, *Kapha* (*Dosha* in body) and other *Dhatu Mala* (waste products from *Dhatu*).^[5]

Purisha is a result of *Anna pachana Kriya* (digestion). It is formed in *Pakwashaya* (large intestine) at third stage of *Avasthapaka* (process of digestion)^[6] At this stage, *Agni* does *Shoshana* (makes dry) of *Anna* (food) and '*Paripindita*' (formed or solid state) form of *Purishais* achieved. *Katubhava* gives rise to *Ahara-Mala-Rupa-Vata* (flatulence). *Visarjana* (excretion) of *Purisha* and *Aharamala Vata* from *Guda* (anal canal) is under control of *Apana Vayu* (a subtype of *Vata Dosha*).^[7]

Vata mootra Pureesha retas mukti means easy passing flatus timely, evacuation of bowels, urine and semen. Formation of *Mala* is the effect of *Agni* and indicates proper functioning of gut. Metabolic wastes are evacuated either through *Pureesha* and *mootra*. Any impairment in evacuation in these *malas* leads to various diseases or symptoms like *Atisara*, *vibhandha*, *mootra krichra*, *attimootrata*, *adhmana* and *atopa* and also it significantly compromises the quality of life, social functioning, loss of work productivity i.e., ability to perform activities of daily living individuals.

In today's fast moving world, life style of mankind has changed substantially and it is now hard to keep up with

the pace of life. Major factors which have changed our lifestyle are technological advancements, faulty dietary habits, reduced physical activity and stress. Workplaces are now equipped with computers and automated machines. Sporting activities have been reduced; young generation is more interested in videogames as compared to outdoor games. People's dietary habits have changed substantially with increase in consumption of animal products, milk and milk products, sugars, fats, oils and carbonated beverages. People are more into the habit of junk and spicy food. Fiber in the diet has reduced a lot.^[8]

Various Pureesha Janaka Dravya Explained In Classics

Anything used to fill up interstices in a wall is *purisha* (Monnier Williams). The main function of *purisha* is *Avastambha* (Bearing of the body). If *Purisha* is decreased in quantity, *Vata* or air moves in the intestines causing spasm and sounds. While moving in the entire abdomen it moves in the upward direction causing pain (Muscular Spasm) in thoracic cavity and flanks.^[9]

As per Astangakara

“*Vit kshayodbhavat/ meshajamadhya kulmasha yava masha dwayadhibhihi*”^[10]

In case of diseases due to a decrease of *purisha*, meat collected from central parts of goat and sheep along with *kulmasha* (Pulses soaked and half cooked) of barley and black gram may be given for consumption.

As per Charakacharya

“*Pureesha kshaye kulmasha kushkunda ajamadhya yava shaka dhanyamlanam*”^[11]

Meat Collected From Central Parts of Goat and Sheep

Properties of *Mamsa* vary with different parts of the animal body. *Madhya Deha Mamsa* (Trunk portion) of all Prani (animal) is *Guru*.^[12] Meat of *Purva Bhaga* (anterior part) of male animal and *Paschima Bhaga* (posterior part) of female animal and *Grabhini* animal is *Guru*. Meat of female animal with *Chatushpada* (four foot) is *Laghu* in nature. *Mamsa* of *Shira* (Head), *Skandha* (shoulder), *Prusta* (back), *Uru* (thigh), *Katya* (hip), *Sakti* (legs) are *Guru* (heavy) in nature. Meat of *Amashaya* and *Pakvashaya* are *guru* in nature in preceding order. Among *Dhatus* from *Rasa* to *Shukra*, successive once are heavier in nature.

Table 1: Guna Karma of Vit Vardhaka Dravyas.

Dravya	Scientific name	Guna	Karma
<i>Ajamamsa</i> , ^[13]	<i>Capra aegagrus hircus</i>	<i>Natisheeta, Guru, Snigdha</i>	<i>Anabhisandi, Brimhana</i>
<i>Avimansa</i> , ^[14]	<i>Ovis aries</i>	<i>Laghu, Ruksha</i>	<i>Brihmana</i>
<i>Kulmasha</i> , ^[15]	-----	<i>Masha yoosha helps to increase abhyantara mala (a.h. su.7/48)</i>	
<i>Yava</i> , ^[16]	<i>Hordeum vulgare L.</i>	“ <i>Yava Pureesha jananaanam</i> ”	
		<i>Madhura – Rasa rooksha, sheeta, guru, sara</i>	<i>vit vata krut, vrishya, sthairyakara, pittakaphahara, peenasa, kasa, swasa, urustambha, twak Amaya</i>
<i>Masha</i> ^[17]	<i>Phaseolusmungo L.</i>	<i>Snigdha, sara, guru, ushna</i>	<i>Bala sleshma mala pittakaraka</i>
<i>Rajamasha</i> ^[18]	<i>Phaseolus vulgaris</i>	“ <i>Rajamasho guru bhoori shakrut rooksha ativatalaaha</i> ”	
		<i>guru, rooksha</i>	<i>Bhoori shakrut, Ativatala</i>
<i>Atmagupta and Kakandola</i> , ^[19] (<i>Katabhi</i>)	<i>Mucuna pruriens</i>	“ <i>Phalani mashaavat vindyad kakandola atmaguptayoho</i> ”	
<i>Shaka</i> ^[20]	-----	<i>Vistambi guru rooksha</i>	<i>Vit vardhaka, Anulomaka</i>
<i>Vrihi</i> ^[22]	-----	<i>Madhura rasa, Guru</i>	<i>Pittakara, Bahumutrapurishoshma</i>
<i>Upodhika/ Spinach</i>	<i>Basella alba. L</i>	<i>Madhura rasa Vipaka - madhura Virya (potency) – cold (shitha) Snigdha, Pichilla, Brumhana</i>	<i>Triptikaarini, Vrishya, Sara</i>
<i>Lakucha/ Panasa</i>	<i>Artocarpus lakoocha Roxb.</i>	<i>Madhura, amla rasa, tangy taste with citrusy overtones</i>	<i>Antioxidant property</i>
<i>Chandrashoor/ Isabgol</i>	<i>Plantago Psyllium</i>	<i>Madhura rasa, sheeta Guna, Madhura Vipaka</i>	<i>Galactagogue and aphrodisiac</i>

Consistency of Stool and Constipation

Constipation is a condition characterized by infrequent bowel movements resulting in the passage of small amounts of hard and dry stools that are painful or difficult to pass. The pathophysiology of it is multifactorial and of patient's habits often reveals contributory and correctable causes, such as insufficient

dietary roughage, lack of exercise, suppression of defecatory urges arising at inconvenient moments, inadequate time for full defecation and prolongs travel. Hence the definition and causes of the disease hold the same in the contemporary science too.

Constipation on an average affects 20% of the population, 12 percent of men and 16 percent of women meet criteria for constipation. Annually, constipation accounts for 2.5 million physician visits and 92,000 hospitalizations the prevalence of constipation is higher in women and in adults. It significantly compromises ability to perform activities of daily living individuals. A review in spite of appropriate adjustment to these patterns and reassurance, the patients often fail to relieve the problem of constipation.

Diagnostic Criteria








Rome II criteria for Constipation

Two or more of the following for at least 12 weeks (not necessarily consecutive) in the preceding 12 months:

- 1) Straining during >25% of bowel movements.

- 2) Lumpy or hard stools for >25% of bowel movements.
- 3) Sensation of incomplete evacuation for >25% of bowel movements.
- 4) Sensation of ano-rectal blockage for >25% of bowel movements.
- 5) Manual maneuvers to facilitate >25% of bowel movements. (e.g., digital evacuation or support of the pelvic floor)
- 6) <3 Bowel movements per week.
- 7) Loose stools not present, and insufficient criteria for irritable bowel syndrome met.

Table 2: Bristol stool scale,^[23] (starting three type of stools are considered as constipation).^[24]

Type 1	 Separate hard lumps, like nuts (hard to pass)	.	0 Wipes, the perfect poop
Type 2	 Sausage-shaped but lumpy	.	1 -3 Wipes, just enough, no more
Type 3	 Like a sausage but with cracks on its surface	.	4 or 5 Wipes, a little much
Type 4	 Like a sausage or snake, smooth and soft	.	6 - 7 Wipes, excessive wiping
Type 5	 Soft blobs with clear-cut edges, (passed easily)	.	8 or 9 Wipes, will clog the toilet
Type 6	 Fluffy pieces with ragged edges, a mushy stool	.	10 Wipes, its on your hands
Type 7	 Watery, no solid pieces. Entirely Liquid	.	+10 Wipes, just take a shower

The fruit pulp contains high amount of moisture (60.7%), mucilage, pectin (2.52%), along with other constituents. It is febrifuge and laxative due to its high moisture, mucilage and pectin contents.^[25] It probably works as laxative through its stool softening as well as bulk forming nature.

Aragwadha (*Cassia fistula*) has been used as a highly effective, mild laxative that is safe even for children, older persons and in pregnancy.^[26] Cassia is supposed to act as a stimulant and bulk forming laxative. The purgative action of cassia is due to the presence of Cathartic acid, Aloe emodine (Anthraquinone) and Chrysophanic acid. It is having a sufficient amount of fiber content in the form of mucilage and pectin. Thus it acts like a bulk forming laxative. Its action being chiefly on the large bowel, it is especially suitable in habitual constiveness. Fennel seeds also contain fiber and complex carbohydrates. Fennel seeds used in the form of powder, act as bulk forming laxative.^[27]

Concept Of Laxatives According To Modern Science^[28]

➤ **Stimulant laxatives** such as bisacodyl (Dulcolax), castor oil, cascara sagrada, senna (Senokot), and phenolphthalein are dangerous, despite the fact that they are non-prescription medications. These are the most commonly abused laxatives. They stimulate the nerves in the walls of the large intestines and cause intestinal contractions as well as fluid and electrolyte changes, and can be habit-forming. In addition, tolerance develops, meaning that higher and higher doses are needed to obtain the same effect.

“Natural” stimulant laxatives usually contain senna. They are stimulant laxatives (see above) that happen to come from plant sources. Their dangers are the same as those of synthetic stimulant laxatives, listed previously.

➤ Non-stimulant laxatives are safer if used correctly and in appropriate doses. They include the following:

- **Osmotic laxatives** include Milk of Magnesia, Epsom salts, Golytely, Colyte, lactulose, sorbitol and Miralax. These work by drawing fluid into the

intestines and are less habit-forming, but can still cause fluid and electrolyte imbalances when used incorrectly. Some require a prescription.

- **Lubricant and emollient laxatives**, such as mineral oil or docusate (Colace), work by softening the stool. These are generally safe to use for a limited time.

- **Bulk-forming laxatives**, such as psyllium (Metamucil), Citracel, and FiberCon, are generally safe and also are a source of dietary fiber. When used in higher than recommended doses, bulk-forming laxatives can cause intestinal problems and block absorption of other nutrients.

Pathya in Constipation

AS PER AYURVEDA	AS PER MODERN
<i>DADHI</i>	CURD
<i>YAMAKA GHRITA</i>	FATTY ACIDS
<i>GUDA</i>	JAGGERY
<i>ADRKA</i>	GINGER
<i>SURA, SIDHU</i>	BEVARAGES WITH LOWER ALCOHOL
<i>GRINJANAKA</i>	CARROT
<i>DADIMA PHALA</i>	POMEGRANATE FRUIT
<i>AMLARASA</i>	CITRUS FRUITS(ORANGE, GRAPES), PRUNES, PEAR
<i>MAMSA RASA</i>	MEAT OF LAMB AND SHEEP
<i>KHADA</i>	BUTTERMILK BOILED WITH VEGETABLES
<i>YAVA</i>	BARLEY
<i>MUDGA</i>	GREEN GRAM
<i>MASHA</i>	BLACK GRAM
<i>SHAKA VARGA(KUSHMANDA, KARKATI)</i>	GREEN LEAFY VEGETABLES,
<i>SOUVARCHALA</i>	BLACK SALT

Principally, there are three ways the vegan diet helps people avoid constipation:

1. Increased intestinal motility/decreased fecal transit time (through the intestine).
2. Increased frequency of bowel movements.
3. Softer stool consistency.

Increased Intestinal Motility/Faster Transit Times

Intestinal transit time is faster in vegetarians compared to non-vegetarians. For this reason, vegetarians are much less prone to excessively strain during defecation. Why is this the case? According to Kabeerdoss *et al.*, there's a marked difference in the gut motility between folks consuming plant-based diets and those consuming omnivorous diets.

Increased Frequency of Bowel Movements

And by extension, there's a significant difference in frequency of defecation between various diet groups, with those on plant-based diets having a higher frequency of bowel movements.

Plant-based diets contain higher amounts of complex carbs and dietary fibers than non-vegetarian diets. For this reason, folks who follow vegetarian diets typically have a higher average number of bowel movements per day than non-vegetarians.

Vegans had higher daily stool frequency than both non-vegetarians and folks on less strict vegetarian diets.

Likewise, the Prospective Netherlands Cohort Study looked at the proportions of folks from various diet groups having more than two stools per day. It found that 7% of vegetarians to have more than two stools/day compared to 5% of pescatarians and only 3% of non-vegetarians.^[29]

The study also looked at the proportions of people having a stool frequency of fewer than three per week and found the vegetarian group to have the lowest incidence of low stool frequency. Another large prospective study looked at the relationship between stool frequency and nutritional factors and found vegans to have more daily bowel movements.^[30]

Softer Stool Consistency

In addition to faster intestinal transit times and higher frequency of bowel movements, stool consistency is often softer in vegetarians than in non-vegetarians. That's right, vegetarians and vegans are less prone to constipation by either frequency of bowel movements or problems with stool consistency.

Why Does Fiber Type Affect Stool Softness?

The benefits conferred by insoluble fibers on stool quality are thought to have to do with how these types of fiber hold water. Ultimately, insoluble fiber increases what's known as fecal volume or bulk, or stool mass if you will.

Whatever you want to call it, this bulky stool is composed of:

- Unfermented fiber—fiber that the colon never got around to fermenting.

- Salts
- Bacterial mass—generally, fecal bulk increases with bacterial proliferation.
- Water—bacteria are about 80% water. So, when there's increased bacterial mass, you get a greater water-holding capacity of the feces.

The fiber in wheat bran is one of the most effective laxatives because it can absorb three times its weight in water, which produces a bulky stool.

GI responses to wheat and rice bran include

- Greater frequency of defecation
- Increased fecal bulk
- Faster intestinal transit time
- Reduced intraluminal pressure.

Other sources of fiber play a role in increasing fecal bulk and decreasing transit time—namely, cellulose, inulin, psyllium, and oligosaccharides.

DISCUSSION

Mala kshaya may also be considered as a cause of constipation i.e., the infrequent passage of stool. The symptoms of *mala kshaya* are pain in cardiac region, flanks and gases with gargling sound, goes upward and moves around in the belly which is explained in *Charaka Samhita*. Thus, by suppression of defecation reflex (*vegadharana*), retention of feces occur which results in constipation. If once there is formation of hard stool, incomplete evacuation of the bowel which results in straining during defecation leads to several complications like hemorrhoids, fissure etc. This condition can be managed by medication and just modification in dietary, lifestyle at the early stages.

Drug selection should be based on the *gunas* of the drugs which are able to pacify vitiated sheeta, chala and ruksha gunas. Hence the drugs which are *snigdha*, *ushna*, *sthir* and *anulomaka* should be selected for the treatment of constipation. Mentioning the properties of *rechaka dravyas* *Charaka* has described that *rechaka dravyas* should be *sarvarasa*, *ushna*, *tikshna*, *sukshma*, *vyavayi* and *vikasi*. According to *Sushruta rechaka dravyas* should be *guru* in nature owing to their *prithvi* and *jala bahula* constitution. Due to this they have the potential to move intestinal contents towards *adhomarga*. Here, in this article the drugs used to relieve the constipation is having the same properties as mentioned above. Same drugs are even used in various conditions like *Atisara*, *Grahani*, *Virechana atiyoga* as *Pureesha kshaya* is one among the *lakshana* in these disorders according to our *Acharyas*.

CONCLUSION

Hence the *Madhura rasa* and *guru guna*, *ushna virya*, have potential of pacifying *vata* and moving the intestinal contents towards rectum. So the above discussed drugs can be used in constipation. Though the

concept is applied in conditions like *Atisara*, *Grahani* and *Virechana atiyoga* because there occurs *malakshayata* as one of the symptom. So in order to maintain the quality of life, social functioning and work productivity; the foods such as Oat meal, Barley, Sweet potatoes, Nuts seeds, Dried peas, Beans, Lentils, Apples, Pears, Berries should be included in the diet. These Soluble fibres functions as prebiotics and support the probiotics (bacteria) we have in our gut thus restore healthy gut bacteria which are essential for digestive health.

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