



### Nutraceuticals in Ayurveda w.s.r to *Yavagu*: A Review Article

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#### Abstract-

Article received on- 16 Feb.  
Article send to reviewer- 17 Feb.  
Article send back to author- 25 Feb.  
Article again received after correction- 03 March.

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In Ayurveda science, root cause of diseases is explained by the concept of *mandagani*. So in Ayurveda classical literature *Acharya* firstly focused on diet because due to faulty food habits digestive power can be hampered. In *samhitas Acharya* explained diet of any individual at many places with their nutritional and pharmacological properties. So in some cases patient can be cured only with the proper food recipes. *Yavagu* are simple recipes with great nutritional as well as pharmacological properties which depends on the drug used to prepare the recipe thus these *yavagu kalpana* should be considered as nutraceuticals.

Key words- *Yavagu*, nutraceuticals, *mandagani*

## Introduction-

In *Ayurveda* classical text *Aahar* is adorned as “*Mahabheshaja*”<sup>1</sup> (supreme drug). *Ahara* is placed firstly in *Tri-upsthambha*<sup>2</sup>-*Ahar* (diet), *nidra* (sleep) and *brhamacharya*, as being the most important factor for a healthy individual. *Acharya Caraka* mentioned that “From the diet, different types of diseases and body itself are said to be originated from the diet<sup>3</sup>.” In *Ayurveda* the primary cause of all diseases is considered ‘*Mandagani* (indigestion or lack of appetite)<sup>4</sup>. So diet is a very important factor in both healthy and diseased conditions. Presently population is gradually suffering from immune dysfunctions, metabolic and degenerative disease due to change in lifestyles, urbanization and industrialization. These changes in last few decades have directly affected our nutritional and qualitative aspect of food.

Nutraceuticals are substances who have nutritional as well as pharmaceuticals properties. Dr. Stephan De Felice coined this term in 1989 and defined as “ a food (or part of food) that provides medical or health benefits including the prevention and/or treatment of a disease.

In our ancient classical text various food preparations are described to be used in healthy as well as diseased conditions i.e. *pathaya kalpana*, *kritanna kalpana* etc.

These recipes are prepared with herbal drugs paste (*kalka*) or decoction (*kwatha*) so they enhance digestive fire as they enhance secretion of digestive enzymes in the body. Thus normal physiological state of *Agni* (digestive fire) is maintained after any diseased conditions or these recipes can be used in *Sansarjana karma* (post body purification procedures or in post operative care).<sup>5</sup>

### *Yavagu Kalpana-*

*Acharya Caraka* explained different varieties of gruel prepared with different medicated *kwatha* and *kalka* to basic rice recipe with a view to eradicate various diseases which can be cured by it<sup>6</sup>. The basic ingredient is rice which is easily digestible and having a lot of nutrients. So these *Aahara kalpana* can be considered in the category of nutraceuticals. *Yavagu kalpana* includes many recipes as *Anna*, *vilepi*, *manda*, *peya* and *yavagus*. The ratio of water or decoction is different in these *yavagu kalpana*. *Yavagu* is prepared by taking six times of water/decoction and one part of rice. *Acharya Caraka* explained 28 types of *yavagu* altering the decoction of herbal drugs, buttermilk or meat broth in various diseases<sup>7</sup>. The dose of herbal medicine is not fixed. Dose is prescribed keeping in view the potency of drug, age and appetite of individual, *dosha* state and nature of disease.

On the basis of drug material’s potency (*virya*) *yavagus* are classified into three types<sup>8</sup>-

S.No	Drug	Dose	Examples
1.	<i>Teekshna virya</i> (strong potency)	One Karsha (12gm)	<i>Shunthi</i> ( <i>Zingiber officinale</i> )
2.	<i>Madhyam virya</i> (Moderate potency)	Half pala (24gm)	<i>Bilva</i> ( <i>Aegle marmelos</i> )
3.	<i>Mrudu virya</i> (mild potency)	One pala (48gm)	<i>Amalaki</i> ( <i>Emblica officinalis</i> )

**Materials and methods-**

Literary references are collected from *Caraka samhita's "Apamarga tanduliya Adhayaya"* and various Ayurveda literatures, published articles in various research journals on concerned topic.

**Aims and objectives-**

1. Nutraceutical aspect of *yavagu* as per Ayurveda texts.
2. Study of 28 *yavagu* described by Acharya *Caraka in apamarga tanduliya* chapter of *sutra sthana* as nutraceuticals.

**Nutraceutical aspect of yavagu-**

*Yavagu kalpana* is very helpful as supportive treatment of various diseases due to its nutritional as well as medicinal properties. In *kritanna varga* (food preparations) of *Acharya Sushruta yavagu* are described as *Manda* (scum), *peya* (liquid gruel), *vilepi* (paste gruel) and *yavagu* (gruel) on the basis of their consistency<sup>9</sup>.

Table no 1.

S.No	<i>kritanna varga</i>	Recipe	Rice:water ratio
1	<i>Manda</i>	In <i>manda</i> boiled rice grains doesn't have distinct identification due to the excess amount of water in this recipe.	1:14
2	<i>Peya</i>	<i>Peya</i> contains boiled grains with distinct fluid.	1:14
3	<i>Vilepi</i>	It has thick mass of boiled grains without distinct liquid and as such lick able.	1:4
4	<i>Yavagu</i>	Contains mostly rice, liquid part is less than <i>peya</i>	1:6 times

**Pharmacological properties of yavagu-**

*Acharya Sharangdhar* described a few pharmacological properties of *yavagu* as<sup>10</sup>-

*Grahini*- *Yavagu* enhances digestive power by its *deepan* (digestive), *pachana* (appetizer) and carminative properties. These properties help to absorb excess water in intestine and make it to obstruct faecal matter and

hence thereafter results in the formed consistency of stool.

*Balya*- Increase strength in case of fatigue and malaise due to its saturating action.

*Tarpani*- It allays thirst and hunger due to its satiating properties.

*Vata nashani*- *Yavagu* pacifies *vata dosha* in body.

*Yavagu* recipe is made by rice and various medicinal herb's decoction or paste. Usually *Raktashali*(red rice) are used to prepare the recipe. It has the highest nutritional value compared to polished rice. *Raktashali* was the most efficacious in subduing deranged humors (**dosha**). It was considered diuretic, spermatophyte, refrigerant, eye-invigorating,

cosmetic, tonic and pleasant. It was good for fevers and ulcers and was antitoxic<sup>11</sup>. Red rice are considered more nutritious, have been found to be rich in iron, zinc and minerals. So *yavagu* is beneficial in both healthy and diseased conditions due to it's nutritional and various pharmacological properties which depends on the drug content in it.

### 28 *Yavagu* explained by Acharya Caraka-

Table no 2.

Sr. no	Name of <i>yavagu</i>	Ingredients	Indications
1	<i>Deepana-shoolaghana yavagu</i>	<i>Pipali (Piper longum), pipali moola, chavya(Piper retrofractum), chitraka(Plumbago zeylanica), nagara (Zingiber officinale)</i>	<i>Aruchi</i> (distaste), <i>agnimandhya</i> (anorexia), <i>ajeerna</i> (indigestion), <i>Udarshoola</i> (abdominal colic)
2	<i>Pachani-grahini peya</i>	<i>Kapitha(Limonia acidissima), bilwa(Aegle marmelos), buttermilk, changeri(Oxalis corniculata), dadima juice(Punica granatum)</i>	Digestive, Diarrhoea, <i>amapachana</i> , Carminative
3	<i>Vatika atisaraghni peya</i>	<i>Panchmoola</i>	<i>Vataja</i> diarrhea
4	<i>Pitta-kapha atisaraghni peya</i>	<i>Shaliparni (Desmodium gangeticum), bilwa(Aegle marmelos), prishniparni(Uraria picta), sour dadima (Punica granatum )</i>	<i>Paittika and shaishmika</i> diarrhea
5	<i>Rakta atisaraghni peya</i>	<i>Goat's milk(Capra aegagrus), hribera(Pavonia odorata), utpala(Nymphoea stellata), nagara(Zingiber officinale), prishniparni(Uraria picta)</i>	Dysentery and diarrhoea with bleeding.
6	<i>Amatisarghni peya</i>	<i>Ativisha(Aconitum heterophyllum), shunthi(Zingiber officinale)</i>	Diarrhoea due to indigestion or <i>amaja</i> diarrhea.
7	<i>Mutra krichaghni peya</i>	<i>Gokshura(Tribulus terrestris), kantakari(Solanum surrattense), phanita(half cooked molasses)</i>	Diuretic, helpful in dysuria
8	<i>Krimighana yavagu</i>	<i>Vidanga(Embelia ribes), piplimula (Piper longum), shigru(Moringa</i>	Worm infestation

		<i>oleifera</i> ), <i>maricha</i> ( <i>Piper longum</i> ), <i>suvarchika kshara</i> , <i>takra</i> (buttermilk)	
9	<i>Pipasaghani yavagu</i>	<i>Mridwika</i> ( <i>Vitis vinifera</i> ), <i>sariva</i> ( <i>Hemidesmus indicus</i> ), <i>laja</i> , <i>pipali</i> ( <i>Piper longum</i> ), <i>nagar</i> ( <i>Zingiber officinale</i> ), <i>honey</i>	Excessive thirst, burning etc.
10	<i>Vishaghani yavagu</i>	<i>Somaraji</i> ( <i>Psoralea corylifolia</i> )	Used to eliminate toxic substances from tissues
11	<i>Brihani yavagu</i>	<i>This yavagu is prepared by adding pork meat juice.</i>	Malnourishment
12	<i>Karshani yavagu</i>	<i>Gavedhuk</i> ( <i>Coix lacryma</i> )	Obesity, emaciating
13	<i>Snehani Yavagu</i>	<i>Til</i> ( <i>Sesamum indicum</i> ), <i>ghee</i> , <i>salt</i>	Useful in <i>snehana</i> therapy (oleation),unctuousness
14	<i>Virukshaneeya yavagu</i>	<i>Kush</i> ( <i>Desmostachya bininnata</i> ), <i>Amlaka</i> ( <i>Embllica officinalis</i> ), <i>shyamaka</i> ( <i>Panicum frumentaceum</i> )	Useful in <i>rukshana</i> (roughness) therapy
15	<i>Dashmuladi yavagu</i>	<i>Dashmoola dravyas</i>	<i>Hikka</i> (hiccup), <i>swasa</i> (dyspnoea), <i>kasa</i> (coughing) <i>kaphahar</i>
16	<i>Pakvasaya rujahar yavagu</i>	<i>Yamaka</i> ( <i>ghee and oil</i> ), <i>Madira</i> ( <i>fermentated drinks</i> )	Intestinal colic
17	<i>Varch pravartaka yavagu</i>	<i>Vegetables</i> , <i>meat</i> , <i>til</i> ( <i>Sesamum indicum</i> ), <i>masha</i> ( <i>Vigna Mungo</i> )	Evacuates bowel
18	<i>Sangrahika yavagu</i>	<i>Jambu</i> ( <i>Syzygium cumini</i> ), <i>amrasthi</i> ( <i>Mangifera indica</i> ), <i>kapitha</i> ( <i>Limonia acidissima</i> ), <i>bilwa</i> ( <i>Aegle marmelos</i> )	Diarrhoea ( <i>vataja atisaar</i> ),IBS
19	<i>Bhedini yavagu</i>	<i>Yava</i> ( <i>Hordeum vulgare</i> ), <i>kshara</i> , <i>chitraka</i> ( <i>Plumbago zeylanica</i> ), <i>hingu</i> ( <i>Ferula assa-foetida</i> ), <i>amlavetasa</i> ( <i>Solena amplexicaulis</i> )	Act as cathartic so useful in severe constipation
20	<i>Vatanulomini yavagu</i>	<i>Haritaki</i> ( <i>Terminalia chebula</i> ), <i>pipalimoola</i> ( <i>Piper longum</i> , <i>nagara</i> ( <i>Zingiber officinale</i> )	Helps in elimination of flatus so useful in <i>udavrita</i> , <i>vatika kasa</i> , constipation etc.
21-22	<i>Sneha vyapad nasini yavagus</i>	1. <i>takra siddha yavagu</i> 2. <i>takra and pinayaka siddha yavagu</i>	<i>Sneha vyapad</i> (incorrect intake of ghee and oil)

23	<i>Visham javarahar yavagu</i>	<i>gomamsa rasa (Cow meat) siddha yavagu</i>	<i>Visham jawara</i> ( irregular fever)
24	<i>Kanthaya yavagu</i>	<i>Yava(Hordeum vulgare),yamaka(ghee and oil),Pipali(Piper longum),amalaki(Phyllanthus emblica)</i>	Throat diseases
25	<i>Retasmarga rujahar yavagu</i>	<i>Tamrachuda rasa(cock) siddha yavagu</i>	Related to diseases of male reproductive organs specially diseases pertaining to seminal passage
26	<i>Vrshya yavagu</i>	<i>masha(Vigna Mungo),vidala(pulses),ghee and milk siddha yavagu</i>	Aphrodisiac -Useful in spermatogenesis and healthy sexual potentiation.
27	<i>Madavinashani yavagu</i>	<i>Upodika( Basella alba) and dahi(curd) siddha yavagu</i>	Narcosis- 1.effected by the intake of poison. 2.narcosis in blood 3.Intake of alcoholic drinks.
28	<i>Kshudhahar yavagu</i>	<i>Aparmaga (Achyranthes aspera)and godha rasa (meat soup of inguana)siddha yavagu</i>	<i>Bhasmaka</i> (insatiable hunger),hyperthyroidism

### Discussion-

*Yavagu as a pathya kalpana* is very useful as it works as the media for various drugs. *Acharya Caraka* explained 28 types of *yavagu* in *sutra sathana* and he again described use of *yavagu* in various diseases i.e. *jwara, grahni, atisara, gulam, arsha, pleeha roga, hikka, swasa, kasa etc in chikitsa sthana*. So the pharmacological properties of *yavagu* depends on the drug content and the nutritional properties comes from rice which is basic part of any *yavagu* recipe. Rice is the second most widely consumed cereal in the world next to wheat. Rice contains 80% carbohydrates, 7-8% protein, 3% fat and 3% fiber. Its mineral content, starch quality, glycemic index and antioxidant activity has made rice unique<sup>12</sup>.

Rice starch is nearly completely absorbed by the human body in compare to wheat, potato and maize (Strocchi and Levitt, 1991).

Rice based Oral rehydration solutions (ORS) have been proved effective in decreasing stool output and improving intestinal absorption in acute diarrhea. (Goldberg and Saltzman, 1996). Rice based ORS are now preferred over glucose based ORS, and have been included in WHO programs. (Goret al., 1992)<sup>13</sup>

### Conclusion-

Ayurveda being an ancient science emphasizes to keep a person physically, mentally and spiritually healthy so it puts more emphasis on diet of individual. In present era lifestyle changes make persons

more susceptible for diseases. Recurrent use of antibiotics for common diseases make digestive system weak. *Yavagu* are simple recipe and can play a great role in treating many diseases because they are light digestive in nature having more nutritional

value. *Yavagu* is a highly useful and clinically appreciable medicated recipe which is indicated in the patients who are not medicine friendly so this is a comfortable way of medicine intake through *yavagu*.

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