



An Ayurvedic Perspective on Diet and Lifestyle Modifications in *Grahani* w.s.r. Irritable Bowel Syndrome

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ABSTRACT

In an era of economic development, with westernization and urbanization, the diet and lifestyle patterns have seen a massive change compared to our ancestors. More and more people are under mental stress and following a sedentary lifestyle. These changes are leading to many lifestyle disorders like DM, HTN, IHD, and Obesity. Digestive and absorptive disorders constitute an important group amongst them.

The system of Ayurvedic medicine emphasizes with the regards to the influence of diet & habits in the manifestation of every disease. *Grahani* is a disease of great clinical relevance in the modern era because of its direct link with the improper food habits and stressful lifestyle of the present time. *Grahani Roga* occurs due to the vitiation of *agni*, which can be correlated to IBS to some extent.

The interventions in mainstream biomedicine for IBS didn't prove as a permanent cure and have limitations owing to their unwanted effects. On the contrary, the main aim of Ayurveda being *swasthasya swasthya rakshanam aturasya vikara prashamanm cha*, we have to consider both the preventive and curative aspect of a disease. According to Ayurvedic principle the treatment in *grahani* is through *snehana*, *swedana* and later *laghana*, *deepana*, *paachana karma* with use of *peya*, *vilepi*, *sura-asava takraprayoga* etc. along with the *shamanaushadis* like *hingwastaka choorna*, *madhukasava*, *talisadi vataka* etc. Apart from these here is an effort made to highlight the diet and lifestyle modification which involves dietary modifications like *deepana*, *pachana*, *laghu and grahee dravyas* which does *vata-pitta shamana* and possessing *kashaya*, *madhura and katu rasa*. And, Yoga and Pranayama practices like *bhujangasana*, *pashchimottanasana*, *sarvangasana* etc.

Key Words: *Grahani, IBS, Yoga, Pranayama, Diet*

INTRODUCTION

In the era of economic development and urbanization, diet and diet timings have been changed with a sedentary lifestyle. Along with this change, one is all the time under terrific mental stress, which causes disturbance to the digestive system resulting in many diseases, amongst which digestion and absorption disorders constitute an

important group which includes Irritable Bowel Syndrome (IBS).

In *Ayurvedic* classics, the basic approach to the cause for any disease is essentially being psychosomatic in nature which is related to the state of equilibrium of *Dosha*, *Dhatu*, *Mala* & *Agni* & a state of wellbeing of mental & spiritual forces (*Atma*, *Indriya* & *Mana*). *Grahani roga* is one among them, in which *agni*, the digestive



power, is supposed to be at fault. *Grahani* which is the site of *Agni* is so-called because of its power to restrain the downward movement of undigested food and retains food till it is fully digested. Functionally weak *Agni* i.e. *Mandagni* causes improper digestion of ingested food, which leads to *Amadosha* and it has pivotal importance in the pathogenesis of *Grahani Roga*¹, which can be correlated to IBS to some extent due to similar clinical features.

GRAHANI ROGA:

Nidana:

- *Abhojana* – not having food
- *Ajeerna* – having food after indigestion
- *Atibhojana* – excessive intake of food
- *Vishamashana* – not having food at the proper time
- *Asathmya bhojana* – consuming unwholesome food
- *Guru sheeta atiruksha sandushta bhojanat* – consuming the food which is heavy for digestion, which is having *sheeta veerya*, *ruksha guna* and which is spoiled
- *Vireka vamana sneha vibhramat* – exhausted after *virechana*, *vamana* and *snehapana*
- *Vyadhikarshanat* – suffering with any illness
- *Desha kala ritu vyshamyat* – due to seasonal variation
- *Vegadharana* – due to suppression of natural urges²

- *Ahitashana* after recovering from *Atisara*, and *manasika karana* like *chinta*, *shoka*, *bhaya*, *krodha*, *lobha* and *moha*³.

Poorvaroopa:

- *Trushna* – thirst, *Alasya*-laziness
- *Balakshaya* – fatigue
- *Vidaaha* – hot flushes
- *Chirapaaka* – delay in the digestion of the food
- *Kayasya gaurava* – heaviness of the body⁴
- *Aruchi* – tastelessness
- *Kasa* – cough
- *Karnakshweda* – ringing in the ears(tinnitus)
- *Antrakoojana* – gurgling sound in the abdomen⁵.

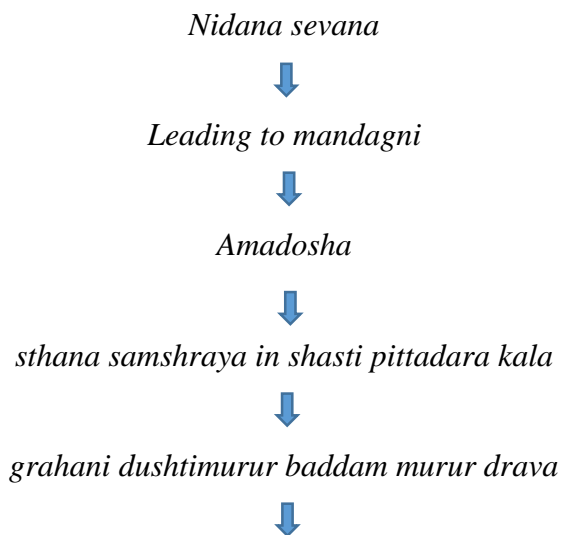
*Samanya Lakshana*⁶:

- *Atisrusta vibadda drava mala pravrutti* – Irregular bowel habits
- *Trushna* – Polydipsia
- *Arochaka* – Anorexia
- *Vairasya* – Bitter taste in the mouth
- *Praseka* – Excessive salivation
- *Tamapravesha* – Darkness in front of eyes
- *Shota* in hands and foot
- *Astiparva ruk* – Pain in the joints and bones
- *Chardi* – Vomiting.
- *Jwara* – Fever.
- *Lohamagandhi* – Mouth will have *loha gandha*.
- *Tiktamla udgarasya* – Bitter and sour belching.



There will be *badda mala* or *drava mala pravrutti* which is either digested or undigested associated with pain and foul smell.

Samprapti⁷:



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Classification:

Overall after considering all the classical authors the types of *grahani* are as follows;

1. *Vataja Grahani*
2. *Pittaja Grahani*
3. *Kaphaja Grahani*
4. *Sannipataja Grahani*
5. *Sangrahani*
6. *Ghatyantra Grahani*

IRRITABLE BOWEL SYNDROME⁸:

Fatty diet, fermentable carbohydrates, post-infectious,

↓
immunosuppression, psychological

↓
Altered host immune function and altered intestinal physiology

↓
Intestinal dysbiosis

↓
Unstable gut microbiota causing chronic gut dysfunction.

↓
Irritable bowel syndrome

Signs and symptoms⁹:

- Abdominal pain, discomfort, and cramps
- Changes in bowel habits, frequency, and consistency of stool (diarrhoea, constipation, or both).
- Discomfort or pain typically relieved after a bowel movement
- Symptoms occur over a long period and typically come and go.
- About 25% to 50% of people who suffer from IBS commonly report additional GI symptoms including:
 - Heartburn, Nausea
 - Early feeling of fullness (satiety)
 - Abdominal fullness and Bloating

TREATMENT IN GRAHANI AND IBS:

As *grahani roga* is caused due to *agnimandya*, the main line of treatment should be to correct the *agnidushti* by *langhana* and *deepana aushadhi prayoga*¹⁰. According to *charaka* the *the pakvashayasta samadosha* should be treated with the *deepana aushadhi prayoga* and if the *ama* is *sarva shareeragata* and *grahanigata* then *langhana-pachana aushadhi prayoga* and administration of *sukhoshna jala* or *vamana* with *madanaphala, pippali* or *sarshapa kashaya* respectively¹¹.



In the same way according to *sushruta* in *grahani dosha*, *deepana chikitsa* can be carried out¹².

The management of IBS includes a combination of approaches to deal with the symptoms and the factors that may trigger them. Education, medications, counseling, and diet all play a role in care. In IBS the line of treatment is purely symptomatic. Depending on the predominant patterns and severity of the symptoms, medications include anti-spasmodic, anti-cholinergic, anti-diarrheal, and anti-depressive agents¹³.

DIET AND LIFESTYLE MODIFICATION IN GRAHANI (IBS)

There is nothing else except diet for sustaining the life of living beings. One is capable to make man disease-free only with the congenial diet. It is also true that in both the conditions, viz. health and disease, the wholesomeness and the unwholesomeness is a prime factor to be thought about, as without proper diet, the use of any drug is futile. Faulty eating practices are the number one culprit, poor food choices & poor food combining are next in line. Together they make up a major cause of digestive diseases.

In IBS the triggers can be food articles, diet timings, lifestyle, medicines, and even mental stress. So the IBS can be managed mainly by dietary modifications, changes in diet time, counseling, and change in the lifestyle.

According to ayurveda the aim of diet and lifestyle modification in a person suffering from *Grahani* can be stated as.

1. An enhancement in the *Agni* can improve the functioning of *Grahani*.
2. The reduction in *Amadosha* with the help of *Deepana* (appetizer), *Pachana* (digestant), and *Laghu* (easy to digest) *Dravyas*.
3. Correction in bowel habit in terms of volume and consistency as normal.
4. Improvement in overall nutrition.

DIET MODIFICATION IN GRAHANI:

Since *Grahani* is caused due to *agnimandya* the *dravyas* used for the person with *Grahani* should possess the following properties;

- *Deepana and Pachana Dravyas*.
- *Laghu and Grahee (absorbent) Dravyas*.
- A diet that mitigates *Vata, Pitta, and Kapha*.
- Mainly *Kashaya* (astringent), *Madhura* (sweet), and *Katu* (pungent) in taste.

Based on the above-said qualities *ahara dravyas* mentioned in different ayurvedic classics which are *pathya* and *apathya* in *grahani* can be listed according to different *ahara vargas* through¹⁴;

1. *Shookadhanya varga*
2. *Shamidhanya varga*
3. *Mamsa varga*
4. *Shaka varga*
5. *Phala varga*
6. *Harita varga*
7. *Madya varga*
8. *Gorasa varga*
9. *Ikshu varga*
10. *Kritanna varga*
11. *Aharayogi varga*

A detailed description of the *dravyas* which can be used in *grahani* has been mentioned in table no. 1.



Table 1 *Pathya apathya in grahani*

Vargas	Pathya	Apathya
Shookadhanya varga	<i>Shastika shaali, purana shaali</i> (varieties of rice)	<i>Godhuma</i> (wheat), <i>Yava</i> (barley)
Shamidhanya varga	<i>Masoora</i> (lentil), <i>tuvari</i> (red gram), <i>aadhaki</i> (pigeon peas), <i>mudga</i> (green gram), <i>kulattha</i> (horse gram)	<i>Nishpava</i> (flat beans), <i>Kaalaya</i> (green peas), <i>Masha</i> (black gram),
Mamsa varga	<i>Kravyada</i> (meat of meat-eating animals), <i>lava</i> (bustard quail), <i>shasha</i> (Indian hare), <i>ena</i> (black deer), <i>tittiri</i> (partridge), types of fish	-
Shaka varga	<i>Changeri</i> (creeping woodsorrel)	<i>Kakamachi</i> (black nightshade), <i>Upodika</i> (spinach), <i>Vastuka</i> (wild spinach), <i>Kushmanda</i> (ash guard) and all leafy vegetables
Phala varga	<i>Daadima</i> (pomegranate), <i>Rambha phala</i> (banana), <i>bilva</i> (bengal quince), <i>shrungataka</i> (water caltrops), <i>kapitta</i> (wood apple), <i>jambu</i> (jamun fruit)	<i>Draksha</i> (grapes), <i>Badara</i> (indian jujube), <i>Poogaphala</i> (arecanut), <i>Narikela</i> (coconut)
Harita varga	<i>Dhanyaka</i> (coriander seeds), <i>mahaa nimba</i> (variety of neem)	<i>Shigru</i> (drumstick), <i>Ardraka</i> (ginger), <i>Lashuna</i> (garlic)
Madya varga	<i>Sura, aranala</i> (types of fermented drinks)	<i>Dhanyamla, Sauveera, Tushodaka</i>
Gorasa varga	<i>Dadhi</i> (curd), <i>paya</i> (milk), <i>grita</i> (ghee), <i>takra</i> (buttermilk)	<i>Dugdha</i> (milk), <i>Mastu</i> (supernatant water of curd/whey)
Ikshu varga	<i>Makshika</i> (honey)	<i>Madhu</i> (a type of honey), <i>Guda</i> (jaggery)
Kritanna varga	<i>Laaja manda</i> (rice gruel)	<i>Gurvannapaana</i> (<i>anna</i> which is heavy for digestion), all types of <i>poopa</i> (fried food), <i>Rasala</i> (fruit juices)
Aharayogi varga	<i>Tila taila</i> (sesame oil), <i>jeeraka</i> (cumin seeds)	<i>Kshara</i> (alkalis)

- *Jangal Mamsa* (meat of animals of the arid zone).
- *Yusha* of *Mudga, Khada* (a sour drink), added with *Dadima* and *ghee*.

Kaphaja

- *Yusha* of dried *Moolaka* or *Kullatha*
- *Yusha* of *Chitrak* (*Plumbago zeylanica*) and *Moolaka*.
- *Peya* of *Ativisha* (*Aconitum heterophyllum*) with *Shunthi* made sour.

Importance of takra prayoga in grahani¹⁶:

- Ayurveda mentions about the usage of *takra* in the management of *grahani* since it does *deepana* and is *laghu* to digest, thus helping to correct the *agni*. And
- Due to its *Kashaya-ruksha guna* it should cause *vataprakopa* but due to its *madhura, amla* and *sandra guna* it does *vata shamana* thus helping to manage *vataja grahani*.

- Due to its *amla rasa*, it should cause *pitta prakopa* but due to its *madhura vipaka* it does *pitta shaman* to help in managing *pittaja grahani* and
- Due to its *abhishyandi guna* it should cause *kapha prakopa*, but due to its *Kashaya rasa, ushna* and *vikaasi guna* helps in managing *kaphaja grahani*.

Procedure for the usage of takra in grahani:

After considering the *bala* and *kala* one can go for the administration of the *takra* in the patients of *grahani* and the type of *takra* can be decided on the predominant *dosha*. The *takra* administered in *grahani* should be freshly prepared and it should not cause *vidaaha*(*sadyaskamavidaahi tat*)¹⁷.

The *takra prayoga* should be done either for 7days, 10 days, 15 days or 1 month based on the *roga* and *rogi bala*. During the *takra* administration, a person with extremely weak digestive power (*atyanta durbala jataragni*) is



advised to take *takra* alone. Or, he can take *laja sattu* with *takra* in the form of *avaleha* and after the digestion of *takravaleha*, one can have *takrapeya* mixed with salt. Also, one can administer *yusha* or *mamsarasa* prepared using *takra*.

Since there will be *mandagni* in *grahani* the *takra* should not be started suddenly and should not be stopped suddenly. Gradually one should start with the little amount by reducing the amount of food to the level of only *takraprayoga* without *anna*. Similarly, while stopping the *takra* one should not stop at once and shift to a normal diet instead one should reduce the *takra matra* gradually and start the usage of *anna* and stop *takra*¹⁸.

Table 2 Foods containing FODMAP and low FODMAP

Foods that contain FODMAPs include (TO BE AVOIDED)	Foods that contain low FODMAPs include (TO BE PRACTICD)
<ul style="list-style-type: none"> • Fruits such as apples, apricots, blackberries, cherries, mango, pears, plums, and watermelon, or juice containing any of these fruits • Vegetables such as asparagus, beans, cabbage, cauliflower, garlic, lentils, mushrooms, onions, etc. • Dairy products such as milk, milk products, soft cheeses, yogurt, custard, and ice cream • Wheat and rye products • Honey and foods with high-fructose corn syrup 	<ul style="list-style-type: none"> • Fruits such as bananas, limes, blueberries, kiwi, oranges, starfruit, and papayas • Vegetables like bean sprouts, cabbage, cucumber, bell pepper, capsicum, carrot, eggplant, tomato, spinach, potatoes, and other leafy greens. • Brown rice, maize, millet, oats, quinoa, and tapioca. • Dairy products like cheese, lactose-free milk, and parmesan cheese. • Black tea, green tea

LIFESTYLE MODIFICATION IN GRAHANI AND IBS:

1. DIET TIMINGS:

A person with *grahani* should have a regular meal and snack schedule that is aiming for 3 moderate-size meals and 1-3 small snacks per day with plenty of fluids in between. One should not go for *samashana*, *vishamashana*, *adhyashana*, and *ahitashana*, etc.

2. REDUCING STRESS LEVEL:

DIET MODIFICATION IN IBS:

FODMAP¹⁹:

Patients with IBS should know what to eat and when to eat. For some patients, the right diet, along with attention to exercise, can control symptoms without medication. The biomedicine advises a low FODMAP diet for a few weeks to see if it helps with your symptoms. Here FODMAP refers to Fermentable Oligo-, Di-, and Monosaccharides and Polyols. If the symptoms improve, we can recommend slowly adding foods that contain FODMAPs back into your diet. Food which contains FODMAP and foods contain low FODMAP is listed in the table no.2.

For many people, stress and anxiety levels are closely related to digestive symptoms. Activities like meditation, yoga, regular exercises help to decrease anxiety levels and depression. Learning more about the disorder, communicating with the health care provider and counseling, and taking more role in self-care will also reduce the stress levels.



3. WORK PATTERNS:

Regular work pattern with frequent breaks in between and avoiding gut stimulants like caffeine, tobacco, fatty foods like fried foods, chips, cookies during working hours is helpful in IBS.

4. SLEEPING HABITS:

Adequate rest with the sleep of at least 6-8 hours, avoiding the day time naps will help in reducing the stress levels which in turn bring down the symptoms of IBS

5. YOGA:

The disease can only be considered as cured when the *agni* is balanced without the use of any external medicine. Though *Ayurvedic* medicines are capable of regularizing the *agni* to normalcy, yoga by virtue of its specificity works as catalytic agents for stabilizing the *agni* at a higher level even after the medicines are withdrawn. This in itself is an important achievement, as medicines cannot be used permanently. *Asanas* which can be adopted in IBS are as follows;

- *Bhujangasana*
- *Mayurasana*
- *Paschimottanasana*
- *Ardha matsyendrasana*

- *Sarvangasana*
- *Halasana*
- *Padahasthasana*
- *Pavanamuktasana*
- *Naukasana*
- *Shashankasana*

6. PRANAYAMA:

Pranayama is a series of breathing exercises that aim at bringing more oxygen to the blood and other vital organs especially the brain. It not only automates the flow of blood but also regulates the proper functioning of thoughts and desires. It gives tremendous will power, generates courage, blemishes ignorance, and helps the knowledge to rise. Thus practicing pranayama regularly will help to regulate the stress levels, preventing the occurrence and flare-ups of IBS. Few of them are *SURYABHEDANA*, *UJJAYI*, *BHRAMARI*, and *BASTRIKA PRANAYAMA*.

PROBABLE DIET CHART FOR GRAHANI:

By considering the rules and regulations and *ahara dravyas* told in the classics we can make a diet chart for both vegetarian and non-vegetarians (see table no. 3 and table no. 4 respectively).

Table 3 The diet chart for vegetarians

Timings	Diet to follow
Early morning	- 500ml [approx. 1 glass] of warm water
Breakfast	- <i>Mudga / Kulatta/ Moolaka Yusha</i> added with pepper powder and salt - Soup prepared with <i>Moolaka</i> added with <i>maricha</i> and ghee or added with buttermilk
At 11:00am	- Freshly prepared buttermilk with salt - Fruits like pomegranate/banana/jamun or fruit juice
Lunch	- <i>Yusha of Shigru</i> (drum stick) prepared with buttermilk. - <i>Laja sattv, Peya</i> prepared with <i>Panchakola Kashaya</i> - <i>Odana</i> with <i>takra</i> , Soup prepared with <i>Moolaka</i> added with <i>maricha</i> & ghee or added with buttermilk - <i>Laaja manda</i> and Freshly prepared buttermilk with salt
Dinner	- Same as lunch, milk (optional)

Table 4 The diet chart for non-vegetarians



Timings	Diet to follow
Early morning	- 500ml [approx. 1 glass] of warm water
Breakfast	- Soup of <i>jangala mamsa</i> or - <i>Yusha</i> of <i>jangala mamsa</i> , by adding <i>Dadima</i> and butter milk,
At 11:00am	- Freshly prepared buttermilk with salt - Fruits like pomegranate/banana/jamun or fruit juice
Lunch	- <i>Jangal Mamsa rasa</i> / cooked <i>jangala mamsa</i> (meat of animals of the arid zone). - Buttermilk with salt
Dinner	- Same as lunch

***NOTE: Along with the above diet Vegetarian diet can also be adopted**

DISCUSSION

Grahani which is the site of *Agni* is so-called because of its power to restrain the downward movement of undigested food and retains food till it is fully digested. Functionally weak *Agni* i.e. *Mandagni*, causes improper digestion of food, which leads to *Amadosha* and it has pivotal importance in the pathogenesis of *Grahani Roga* which is closely related to IBS.

In the current scenario due to changing lifestyle and mental stress, people are more prone to the lifestyle disorders among which IBS is also one. The diet modification helps in the correction of the *agni* and lifestyle modification like yoga and pranayama helps to reduce the stress. Thus, helping in the reduction of the symptoms and

improvement in the food intake as well as the digestion.

Here we have tried to compile the importance of diet in the causation of *grahani*. As there will be a diminution of *agni* in *grahani*, to correct this we have listed out the *ahara dravyas* having *gunas* such as *deepana*, *pachana*, *laghu*, *grahi* and *madhura*, *kashaya*, *katu rasa* according to different *vargas*. Based on these *dravyas* the food preparations which can be adopted have been

described in detail. The importance and usage of *takra* in *grahani* have been explained including the type of *takra* to be used, *matra*, and duration for *takraprayoga*. Also, we have given a brief description of FODMAP concerning IBS in conventional modern medicine practice as compared to ayurvedic practice. We also have prescribed a probable diet chart that could benefit a patient of *grahani*.

Along with diet, lifestyle modification plays an important role in the management of *grahani* which includes correction in diet timings, work pattern, stress level, sleeping habits. And the practice of Yoga and Pranayama.

Thus in a psycho-somatic illness like *grahani* / IBS a collective approach of diet, life style modifications along with medications will help in reducing the signs and symptoms and helps in attaining a state of equilibrium of *Dosha*, *Dhatu*, *Mala* & *Agni* as explained in ayurvedic classics.

CONCLUSION

Thus as described above *Grahani* roga is a chronic disease of *Annavaha* and *Purishavaha srotas* developed due to alteration of *Agni* & *Manas*, and correlates well with IBS-A PSYCHOSOMATIC ILLNESS. Therefore, adopting a healthy lifestyle, regular food habits, adequate sleep, and practicing



Yoga & Pranayama based on ayurvedic principles can control the signs and symptoms more effectively as compared to only drug therapy.



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