



# **CHATUHSAMA VATI AS A THERAPEUTIC OPTION FOR FUNCTIONAL CONSTIPATION (MALAVIBANDHA) IN CHILDREN: AN INTEGRATIVE REVIEW**

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**Abstract:** Functional constipation is one of the most common gastrointestinal complaints in children, often associated with dietary habits, lifestyle factors, and psychological stress. In *Ayurveda*, this condition closely resembles *Malavibandha*, which primarily results from *Vata dosha* vitiation, impaired *Agni*, and dryness in the *Pakvashaya*. *Chatuhusama Vati*, a classical *Ayurvedic* formulation, possesses *Deepana*, *Pachana*, *Anulomana*, and *Vata-shamana* properties. This article explores the *Ayurvedic* understanding of paediatric *Malavibandha* and elucidates the therapeutic role of *Chatuhusama Vati* in its management.

**Index Terms** - *Ayurveda*, Functional Constipation, *Malavibandha*, *Chatuhusama Vati*, *Malawashtambha*, *Malavrodha*

## **INTRODUCTION:**

Functional Constipation is defined as a delay or difficulty in defecation present for >1 month and significant enough to cause distress to the patient [1]. Functional constipation accounts for nearly 90–95% of paediatric constipation cases [2].

In *Ayurveda*, *Malavibandha* is described as a disorder of *Apana Vata*, often aggravated by [3, 4, 5]:

- *Ruksha*, *Sheeta*, *Laghu Ahara*
- Irregular food habits
- Suppression of natural urges (*Vegadharana*)<sup>[6]</sup>
- Mental stress and fear

Early management is essential to prevent complications such as fissures, abdominal pain, and stool withholding behaviour.

## **MATERIALS AND METHODS:**

This narrative review was conducted by analysing classical *Ayurvedic* texts, pharmacognosy literature, and available experimental and clinical studies related to the ingredients of *Chatuhusama Vati*. Secondary data were obtained from standard textbooks and research articles indexed in PubMed and Google Scholar. *Ayurvedic* properties and modern pharmacological actions of the individual ingredients were correlated with the clinical features and pathophysiology of functional constipation in children.

**Disease review:****Functional Constipation:**

Functional constipation (FC) is a chronic gastrointestinal disorder characterized by infrequent bowel movements, difficulty during defecation, hard stools, and a feeling of incomplete evacuation in the absence of an underlying organic pathology.

**Clinical Features and Diagnostic Criteria:**

The Rome IV criteria define paediatric FC based on symptoms such as  $\leq 2$  defecations per week, faecal incontinence, retentive posturing, painful or hard bowel movements, passage of large stools, and the presence of retained faecal mass in the rectum [7].

**Epidemiology:**

Paediatric FC has a reported global prevalence ranging from 0.7% to 29.6% [8], with variations influenced by age, diet, lifestyle, and methodology. In India, FC is commonly associated with low fibre intake, inadequate fluid consumption, and behavioural factors [9].

**Pathophysiology:**

Functional constipation is multifactorial in origin. Dietary factors such as low fibre and fluid intake [10], behavioural factors including stool withholding due to pain or fear [11], and altered colonic motility leading to prolonged transit time play key roles [12]. Dysregulation of the gut–brain axis has also been implicated [13], contributing to abnormal bowel habits and symptom persistence.

**Conventional Management:**

Conventional management includes dietary modification [14], behavioural therapy [15], and pharmacological agents such as osmotic laxatives [16]. However, long-term use may be associated with adverse effects, highlighting the need for safe and sustainable alternatives. However, conventional laxatives may lead to adverse effects such as abdominal cramping, bloating, and potential dependency with long-term use [17, 18].

**Malavibandha:**

*Malavibandha* is described in Ayurveda as difficulty in the passage of stool, primarily resulting from *Vata Dosh* vitiation, especially *Apana Vata*, along with impaired *Agni*. Classical texts associate the condition with dryness, obstruction, and reduced colonic motility.

**Nidana and Samprapti:**

Causative factors include intake of dry and processed foods, inadequate water and fibre consumption, irregular dietary habits, sedentary lifestyle, and psychological stress. These factors lead to *Agnimandya*, formation of *Ama*, and vitiation of *Vata*, resulting in impaired digestion and accumulation of dry, hard stools in the *Pakvashaya*. Children are especially prone due to *Mridu Dhatu* and immature digestive capacity.

**Correlation with Functional Constipation:**

Functional constipation in modern medicine has a multifactorial pathophysiology involving:

- Slow colonic transit time
- Disordered defecation dynamics
- Dietary and behavioural influences
- Microbiota alterations

While the terminology differs, there is clear conceptual overlap with *Malavibandha* especially the role of impaired motility (analogous to *Vata* dysfunction) and dietary/lifestyle influences on bowel habit.

**Therapeutic Approach in Ayurveda vs Modern Medicine:**

In classical Ayurveda, treatment of *Malavibandha* focuses on:

- *Deepana–Pachana*
- *Vata shamana* and *Anulomana*
- *Snehana*, *Swedana*, and *Virechana*
- Diet and lifestyle correction

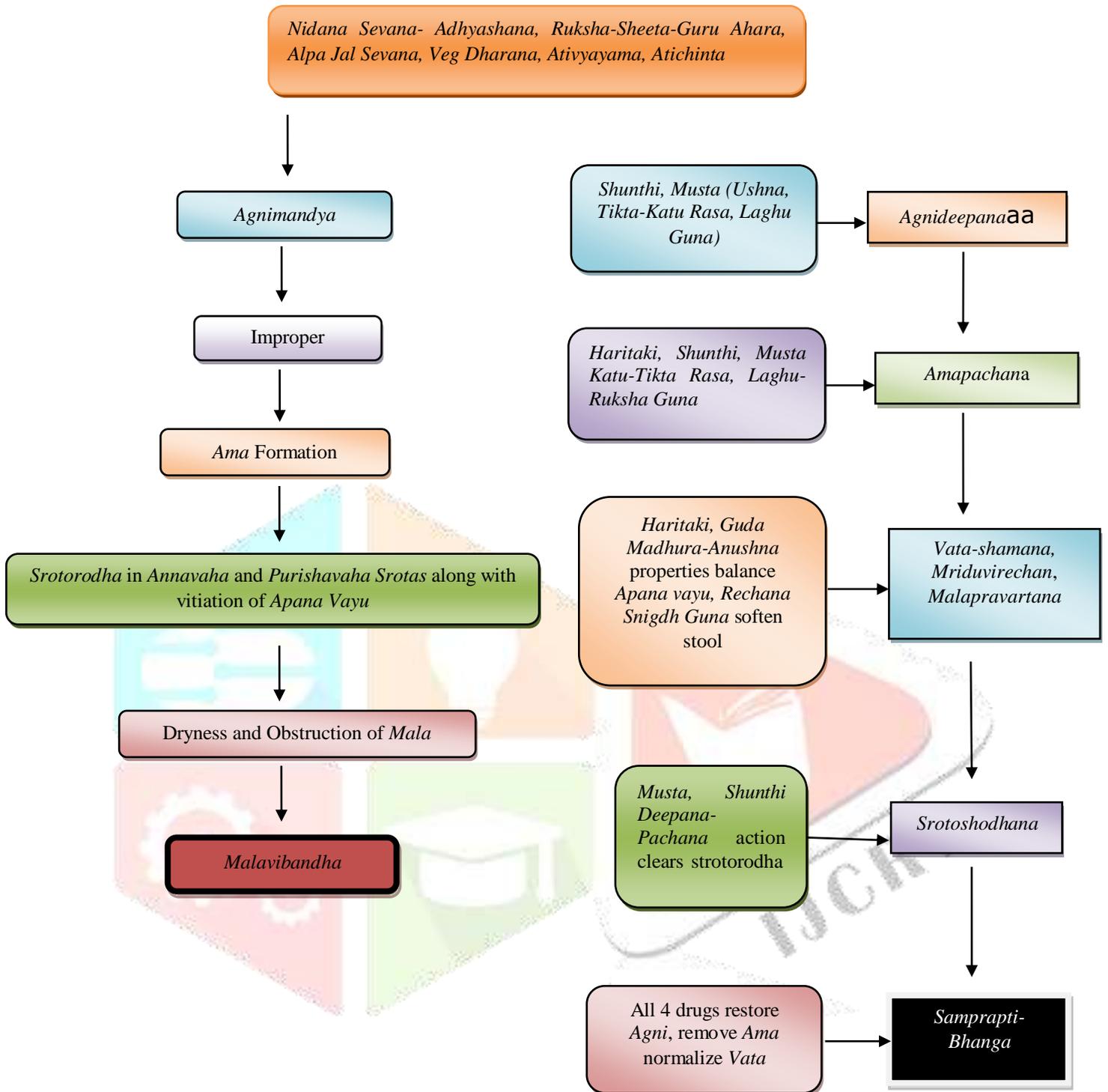
**Composition of Chatuhusama Vati:**

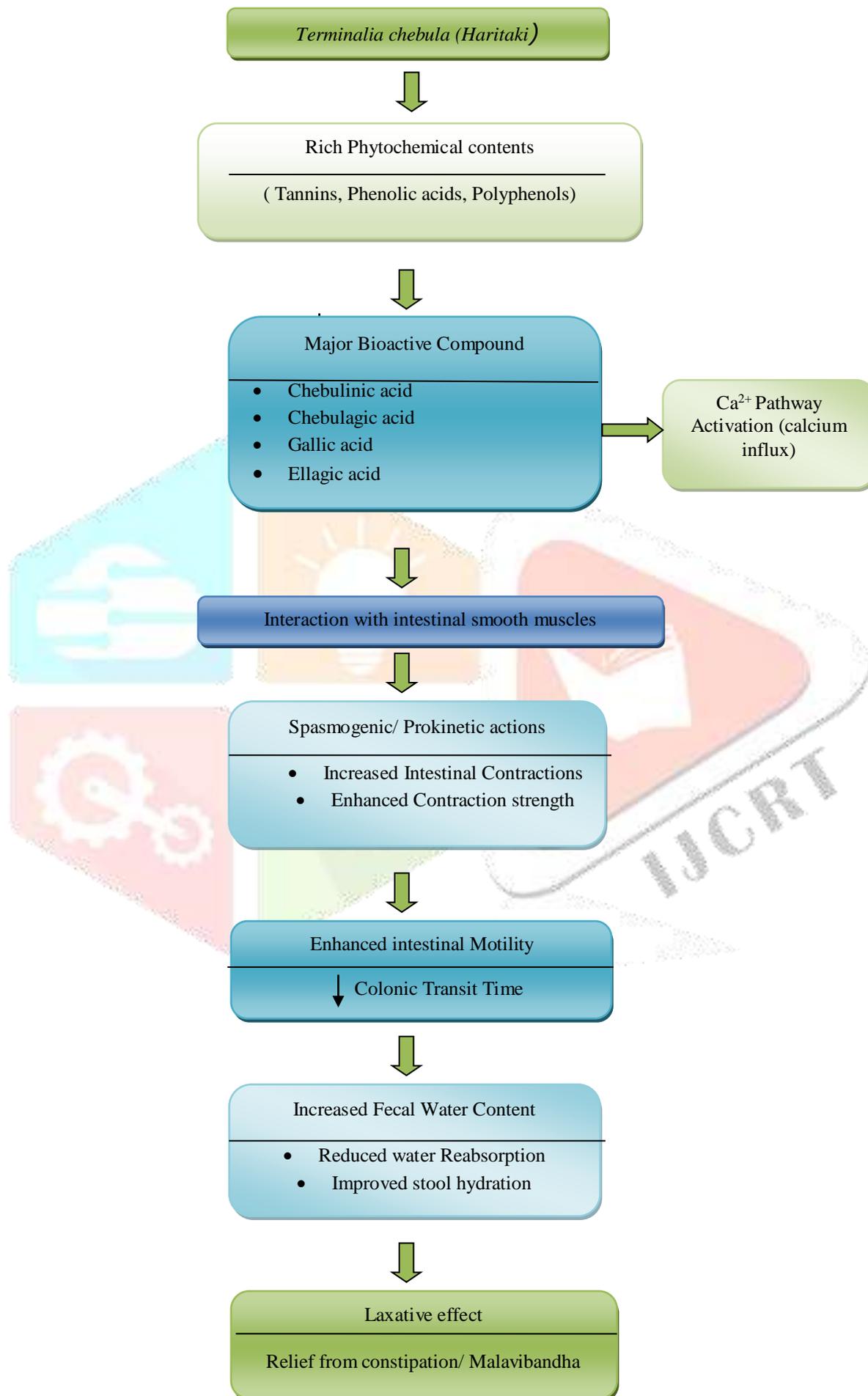
अभयानागरंमुस्तं गुडेनसहयोजितम्।  
 चतुःसमेयंगुटिकात्रिदोषनीप्रकीर्तिता॥४१॥  
 आमातिसारमानाहंसविबन्धविषूचिकाम्।  
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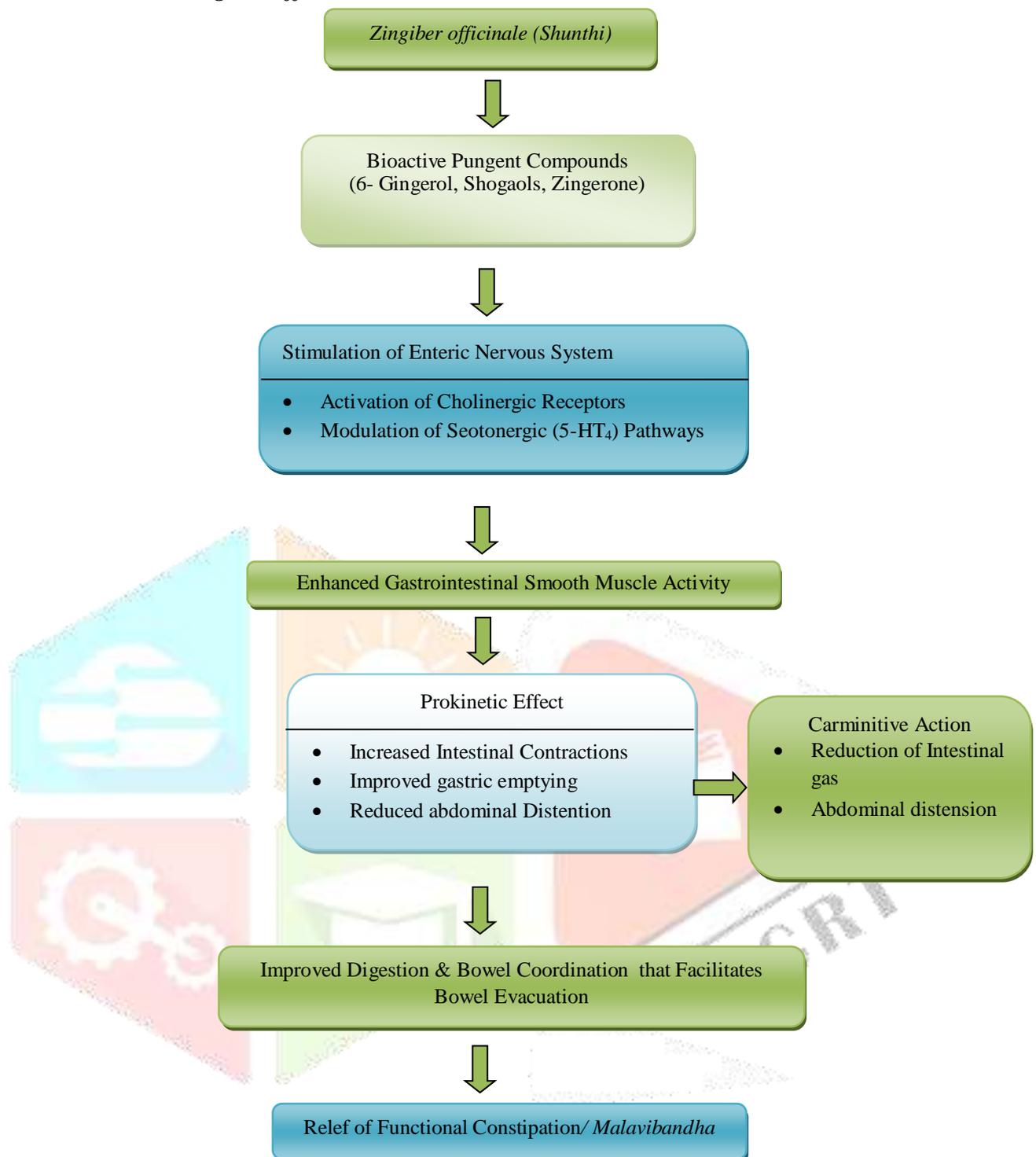
वंगसेनसंहिताअध्याय १०/४१-४२ [19].

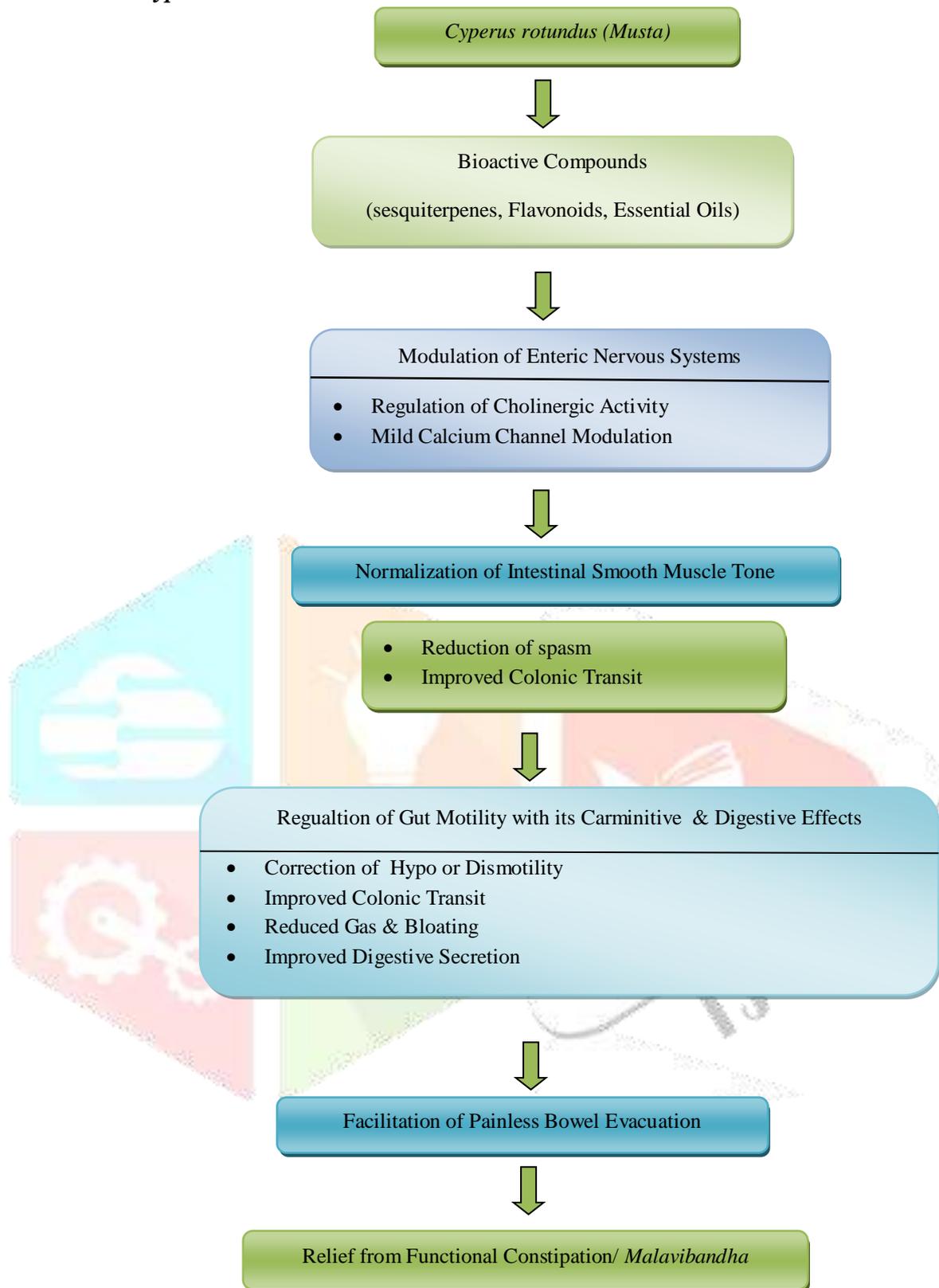
<b>Dravya &amp; Latin name</b>	<b>Rasa</b>	<b>Virya</b>	<b>Vipak</b>	<b>Guna</b>	<b>Upyuktang</b>	<b>Doshagnata</b>
<i>Shunthi</i> ( <i>Zingiber officinale</i> Roxb.) <sup>[20]</sup> .	<i>Katu</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Laghu, snigdha</i>	<i>Shushka Kanda</i>	<i>Tridosahar</i>
<i>Haritaki</i> ( <i>Terminalia chebula</i> Linn.) <sup>[21, 22]</sup> .	<i>Madhur, Amla, Katu, Kashaya, Tikta</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Laghu, Ruksha, Anulomak, Vibandhaghna</i>	<i>Phala</i>	<i>Tridosahar</i>
<i>Musta</i> ( <i>Cyperus rotundus</i> Retz.) <sup>[23]</sup> .	<i>Tikta, Katu, Kashaya</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Laghu, Ruksha</i>	<i>Kanda</i>	<i>Kaph pitta ghna</i>
<i>Guda</i> <sup>[24]</sup> .: <i>Natishleshmakara, Dhautashrushtashakruta</i>						

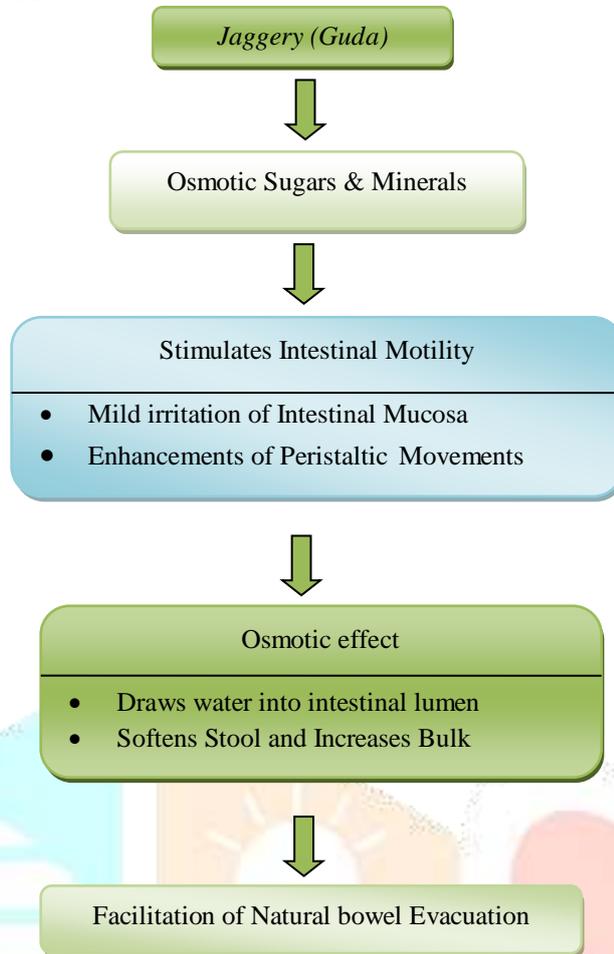
**Samprapti-Bhanga by Chatuhusama Vati:**



Pharmacological and Therapeutic action of *Chatuhusama Vati* according to Modern Science:Mechanism of action *Terminalia chebula* [25, 26]:

Mechanism of action *Zingiber officinale* [27, 28, 29, 30].

Mechanism of *Cyperus rotundus* [31, 32, 33]:

**Mechanism of Jaggery** <sup>[34, 35]</sup>:**DISCUSSION:**

Functional constipation in children is a multifactorial condition involving impaired gut motility, defecation dysfunction, and behavioral factors. In Ayurveda, it corresponds to *Malavibandha*, caused mainly by *Vata dosha* vitiation and *Agnimandya*. *Chatuhusama Vati* addresses these mechanisms through synergistic digestive and motility-regulating actions.

- ***Terminalia chebula (Haritaki)*** enhances colonic transit and stool hydration via mild laxative and prokinetic effects, supporting *Anulomana* of *Apana Vata*.
- ***Zingiber officinale (Shunthi)*** stimulates enteric nervous system activity, improving gastrointestinal motility and correcting *Agnimandya*.
- ***Cyperus rotundus (Mustaka)*** modulates intestinal smooth muscle tone, reducing spasm and improving coordinated peristalsis.
- ***Guda (Jaggery)*** acts as a gentle osmotic and bulk-forming agent, softening stools and facilitating evacuation.

Together, the formulation improves digestion, normalizes bowel motility, and promotes painless defecation, offering advantages over purely symptomatic laxative therapy.

**CONCLUSION:**

*Chatuhusama Vati* is a rational *Ayurvedic* formulation for pediatric *Malavibandha*, acting through *Deepana*, *Pachana*, and *Anulomana* mechanisms. Its integrative pharmacological and *Ayurvedic* actions support safe, effective management of functional constipation. Further clinical studies are warranted.

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