

AYURVEDIC TREATMENT FOR FOOD INTOLERANCE: A COMPREHENSIVE
REVIEW OF IAFA FOR ALLERGY- AAHARA AMRUTHAM FORMULATIONS

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ABSTRACT

Background: Food intolerance is a prevalent condition characterized by adverse physiological responses to food, predominantly linked to enzymatic deficiencies, microbiota imbalances, and low-grade inflammation. According to Ayurveda, food intolerance can be correlated to impaired Agni (digestive fire) and Ama (toxin) accumulation. IAFA Ayurveda presents Aahar Amrutham formulations designed to target these pathologies. **Objective:** To critically evaluate the Ayurvedic pharmacology and modern evidence regarding ingredients or herbs present in IAFA's Aahar Amrutham formulations, i.e., Aahar Amrutham Rasa, Bindu, Gulika, and Chai, and their therapeutic relevance in food intolerance. **Methods:** Comprehensive data mining was performed using IAFA official product compositions, classic Ayurvedic texts like Charaka Samhita, Sushruta Samhita, Bhavaprakasha, and modern literature databases like PubMed, Scopus, etc. Herbal constituents were analyzed for their roles and experimentally verified pharmacological profiles. **Results:** Multiple herbs, *Aegle marmelos*, *Cyperus rotundus*, *Phyllanthus niruri*, *Punica granatum*, *Embolia officinalis*, *Boerhavia diffusa*, *Zingiber officinale*, etc., show synergistic effects in food intolerance. They fulfilled various Ayurvedic actions such as Deepana, Grahi, Pittahara, and modern roles, including anti-inflammatory, antioxidant, immunomodulatory, and gut microbiota modulating activities. Each formulation exhibited specific herb combinations that can be used for pediatric to adult food intolerance manifestations (Purusham Purusham Vikshayam). **Conclusion:** Food intolerance represents a growing global challenge, often resulting in chronic digestive disturbances, nutritional imbalances, and reduced quality of life. Modern management strategies, though useful, are largely limited to dietary eliminations and symptomatic support, without adequately addressing the underlying pathophysiology. Ayurveda provides a deep-rooted explanation of food intolerance in terms of Agni-Dushti, Ama formation, and Viruddha Ahara, thereby offering both preventive and therapeutic results. While controlled clinical trials and further studies are important for scientific validation and further standardization, the consistent outcomes observed in large patient cohorts strongly indicate that Aahar Amrutham formulations represent a safe and sustainable approach to managing food intolerance.

KEYWORDS: Food intolerance, IAFA, Aahar Amrutham Rasa, Aahar Amrutham Gulika, Aahar Amrutham Chai, Aahar Amrutham Bindu, Shriphala, Allergy, Microbiota, GIT disturbances.

1. INTRODUCTION

Food intolerance is characterized by non-immunologic adverse reactions to dietary components, distinct from IgE-mediated allergies. It does not involve the immune system like food allergies but instead arises due to the inability of the body to properly break down specific components of food due to a deficiency of the enzyme. Commonly, we can include lactose intolerance caused by low levels of lactase enzymes, gluten intolerance caused by non-celiac gluten sensitivity, and fructose intolerance, etc. It has a multifactorial etiology, which includes enzymatic insufficiencies, fermentable oligosaccharides intolerance, dysbiosis, and systemic low-grade inflammation, resulting in symptoms such as bloating, diarrhea, and fatigue. Ayurvedic classical texts recognize similar manifestations by concepts of impaired Agni

(digestive fire) and Ama (toxic metabolic residue) accumulation. These principles make us understand that to fight the deep-rooted cause of this disease, we need Ayurvedic intervention that works on GIT issues. IAFA's Aahar Amrutham formulation line comprises Rasa (syrup), Bindu (pediatric drops), Gulika (tablet), and Chai (herbal tea), which is formulated to alleviate digestive distress in food intolerance through polyherbal synergistic effect. This review provides an in-depth knowledge of the Ayurvedic basis and modern pharmacological properties of this formulation.

2. METHODS

2.1 Data Collection: Ingredient compositions of Aahar Amrutham Rasa, Bindu, Gulika, and Chai were extracted from IAFA's official product information sources.

2.2 Ayurvedic Analysis: Herbal ingredients were matched with descriptions from classical Ayurvedic texts such as Charaka Samhita, Sushruta Samhita, Bhavaprakasha Nighantu, and other recognized sources.

2.3 Modern Review: A systematic literature search was conducted on PubMed and Scopus databases for phytochemical compositions and pharmacological activities of each herb.

2.4 Comparative Approach: Ayurvedic pharmacological properties like Rasa, Guna, Virya, Vipaka, and Karma were correlated with validated modes of action to assess implications for managing food intolerance.

3. RESULTS

3.1 Aahar Amrutham Rasa (Syrup)

IAFA Aahar Amrutham Ras is a Swaras (herbal juice extract) formulation designed to support gastrointestinal balance and improve food tolerance. It is composed of five herbs, i.e., *Euphorbia thymifolia* (Chotti Dudhi), *Vitex negundo* (Nirgundi), *Aegle marmelos* (Bilva), *Phyllanthus niruri* (Bhumi Amla), and *Boerhavia diffusa* (Punarnava), that are used for digestive disorders, microbial overgrowth, and food-induced inflammatory responses. The liquid (Swaras) ensures rapid absorption and systemic action, consistent with the Ayurvedic principle of Swaras chikitsa.

1. *Euphorbia thymifolia* (Chotti Dudhi)

Ayurvedic perspective

It balances Agni and reduces Ama-visha. Chotti Dudhi is indicated in diarrhea, dysentery, vomiting, and worm infestations. Cooling (Sheeta) effect helps neutralize gastric acidity.

Modern validation

Euphorbia species, including *E. thymifolia*, contain polyphenols, tannins, and flavonoids and have demonstrated antimicrobial, antioxidant, and mast-cell or anti-anaphylactic activities in vitro and animal studies. Experimental work shows activity against enteric pathogens and free-radical scavenging that can protect mucosal tissue from oxidative injury. Clinical data is limited, but preclinical evidence supports its use in infectious and inflammatory diarrheal states.

Key mechanisms supported by studies

Bacterial growth inhibition, antioxidant, i.e., reduces oxidative mucosal injury, modulation of inflammatory mediators, and mast-cell stabilization that helps limit immediate-type mucosal reactions.

2. *Vitex negundo* (Nirgundi)

Ayurvedic perspective

Nirgundi is Tridosha balancing, especially Kapha and Vata. It acts as Krimighna (anti-parasitic), Shothahara (anti-inflammatory), and Vedana Sthapaka (analgesic). Thus, it is used in abdominal swelling, pain, and food-induced allergic reactions.

Modern validation

Vitex negundo extracts are rich in flavonoids like luteolin, iridoids, and phenolic acids. Recent studies demonstrate its anti-inflammatory, anti-allergic, and immunomodulatory effects that result in the reduction of cytokine release, attenuation of eosinophilic or allergic inflammation in airway models, and inhibition of pro-inflammatory signaling. These properties help in reducing food-triggered inflammatory responses and visceral hypersensitivity.

Key mechanisms supported by studies

Inhibition of pro-inflammatory cytokines, e.g., TNF- α , IL-6, mast-cell or mediator stabilization, and antioxidant activity gives relief in mucosal inflammation and allergy-like food intolerance.

3. *Aegle marmelos* (Shrifal / Bael)

Ayurvedic perspective

It is classified as grahi (absorbent) and deepana (digestive stimulant). Bilva is used in chronic diarrhea, dysentery, and ulcerative conditions. Its kashaya rasa (astringency) pacifies excessive Pitta and improves mucosal protection.

Modern validation

A. marmelos unripe fruit pulp and extracts have consistent preclinical evidence for antidiarrheal, anti-secretory, antimicrobial, and gastric-mucosal protective effects. Animal models show reduced castor-induced diarrhea and protection against gastric mucosal damage.

Key mechanisms supported by studies

Tannin-mediated reduction of intestinal secretions, antimicrobial activity against enteropathogens, enhancement of mucous secretion and mucosal defense reduce ulcer index, and antioxidant action that protect gut mucosa. These are directly relevant to diarrhea, dyspepsia, and mucosal irritation seen in food intolerance.

4. *Phyllanthus niruri* (Bhoomi Amla)

Ayurvedic perspective

Bhoomi Amla pacifies aggravated Pitta, prevents ulcer formation, and supports Yakrit (liver). It enhances enzyme activity and supports the metabolism of complex foods. Traditionally indicated in acidity, gastritis, and food-induced Pitta aggravation.

Modern validation

P. niruri is supported by multiple in-vitro, animal, and some clinical studies showing hepatoprotective, anti-ulcer, antioxidant, and anti-inflammatory effects. Recent experimental papers demonstrate reduction of liver enzymes, restoration of antioxidant defenses, downregulation of inflammatory markers (e.g., TNF- α), and protection of gastric mucosa. These properties support roles in gut-liver axis modulation and protection against acid or peptic mucosal damage.

Key mechanisms supported by studies: Antioxidant enzyme up-regulation (GSH, CAT), suppression of inflammatory mediators, reduction of gastric acid-related damage, and hepatoprotection (facilitating digestion and detoxification).

5. *Boerhavia diffusa* (Punarnava)

Ayurvedic perspective

Punarnava is a Deepana (enhances digestion), Shothahara (anti-inflammatory), and Shothahara (kapha-pitta pacifier) herb. It helps in improving absorption of nutrients, prevents bloating, and regulates bowel movements.

Modern validation

B. diffusa is well described in reviews for anti-inflammatory, diuretic, hepatoprotective, and immunomodulatory activities. Isolated alkaloids, e.g., punarnavine and boeravinones, show anti-inflammatory effects in models, including inhibition of human sPLA2, modulation of oxidative stress, and hepatoprotective actions, thus supporting improved metabolism of dietary antigens and reduction of low-grade gut inflammation.

Key mechanisms supported by studies: Inhibition of phospholipase A2 and downstream lipid mediators, antioxidant defense, promotion of intestinal motility or regularity, i.e., fiber and phytosterols, and immunomodulation.

Integrated Mechanism of Action of herbs in Aahar Amrutham Rasa

The synergistic action of these five herbs results in Agni Deepana and Ama Pachana, i.e., improved digestion and metabolism.

Antimicrobial or anti-infective action- *Euphorbia thymifolia* and *Aegle marmelos* provide inhibitory activity against enteric pathogens and reduce small-intestinal microbial overgrowth risk, thereby reducing microbe-driven gas/diarrhoea.

Anti-inflammatory and mast-cell or mediator modulation: *Vitex negundo*, *Boerhavia diffusa*, and *Phyllanthus niruri* have demonstrated reduction of pro-inflammatory cytokines and mediator activity (including sPLA2), which lowers mucosal immune activation that can present as delayed or non-IgE food reactions.

Mucosal protection and anti-secretory effects: *Aegle marmelos* and *Phyllanthus niruri* support mucous production, reduce gastric secretions, and protect against ulceration in animal models. This mechanism is helpful when intolerance manifests gastritis, epigastric pain, or mucosal sensitivity.

Digestive enzyme or Agni support and motility normalization: Several constituents, e.g., phytosterols, pungent aromatic compounds, stimulate digestive secretions or normalize transit time, improving digestion

of problematic foods and reducing substrate for fermentation (gas production). This is supported indirectly by studies showing improved enzyme or activity profiles after herb administration.

Antioxidant and hepatoprotective support: *P. niruri*, *B. diffusa*, and *E. thymifolia* raise antioxidant defenses in preclinical models and protect hepatic detoxification pathways, supporting the gut–liver axis and improving systemic handling of dietary metabolites, thus reducing the formation or persistence of "Ama".

The phytochemical and pharmacological literature provides a coherent mechanistic explanation for the clinical effects of Aahra Amritam Rasa on food intolerance. The combined antibacterial, anti-inflammatory, mucosal protective, and hepatoprotective activities of the five herbs likely work synergistically to reduce microbial contributors to intolerance, calm mucosal immune or inflammatory responses, protect and repair gut lining, and restore digestive function.

3.2 Aahar Amrutham Bindu (Pediatric Drops)

IAFA Aahar Amrutham Bindu is a herbal drop or liquid formulation intended especially for gentle use, i.e., for children or sensitive individuals to support digestion, reduce gastric discomfort, and modulate food-intolerance-related symptoms. Its ingredients are Vacha (*Acorus calamus*), Musta (*Cyperus rotundus*), Parata (*Fumaria indica*), Bilva (*Aegle marmelos*), Dadima (*Punica granatum*), Sariva (*Hemidesmus indicus*).

1. Vacha (*Acorus calamus*)

Ayurvedic perspective

Vacha is used as a Deepana (digestive stimulant) and Ama pachana (digesting metabolic toxins). It pacifies Vata, helps reduce bloating and gas, and supports appetite. It is also used for its cooling and digestive soothing effects.

Modern scientific validation

Acorus calamus (Vacha) has been studied for its anti-inflammatory, anti-emetic, and antimicrobial properties. Some studies suggest that its essential oil components may suppress gastrointestinal spasms. A review of *A. calamus* indicates that it has traditional use for gastrointestinal issues and modern experimental evidence in animal models showing reduced intestinal secretion or motility disturbances. However, much of the safety data is mixed, and some constituents like β -asarone have been studied for toxicity in high doses, so its Shodhana (purification) before using is necessary.

2. Musta (*Cyperus rotundus*)

Ayurvedic perspective

Mustaka acts as Dipana, Pachana, Grahi, Sangrahana, and Shothahara Dravya. It is commonly used for abdominal pain, flatulence, diarrhea, and indigestion.

Modern scientific validation

A methanolic extract of *C. rotundus* rhizome was shown to significantly reduce aspirin-induced gastric ulcers in rats and also increased antioxidant enzyme activity (SOD, GPx) and reduced lipid peroxidation in gastric mucosa. A recent review covers the phytochemistry of *C. rotundus* and its therapeutic uses. It describes its flavonoids, sesquiterpenes, and phenolic compounds, with demonstrated antioxidants, anti-inflammatory, and anti-ulcerogenic activity in animal and ex vivo models. *C. rotundus* has been shown to modify gut microbiota in animal studies, improving beneficial microbes and reducing inflammatory markers.

3. Parpata (*Fumaria indica*)

Ayurvedic perspective

Parpata, with its cooling (Sheetala), Pittahara properties help relieve burning sensations and soothe irritation of the gut lining. It is used for digestive issues with acidity, gastritis, or ingestion of incompatible foods.

Modern scientific validation

Some in vitro and animal model studies show that extracts of *Fumaria* species have antioxidant, anti-inflammatory, and hepatoprotective properties. There is preliminary evidence of anti-ulcer or mucosal protective effects in some *Fumaria* extracts, but no clinical RCTs targeting food intolerance or digestive outcomes have been identified in recent PubMed literature.

4. Bilva (*Aegle marmelos*)

Ayurvedic perspective: Bilva is the classic herb for regulating bowels. It is Grahi (absorbent), Deepana (stimulates digestion), and Shothahara (soothes inflammation). It helps with diarrhea-dysentery, flatulence, and neutralizes Pitta.

Modern scientific validation

Several animal studies document *Aegle marmelos* fruit reducing diarrhoea (castor oil-induced), reducing gastric secretion, and protection against ulcer formation. It is also reported for antioxidant activity in mucosal tissues; compounds like tannins and coumarins contribute to mucosal protection.

5. Dadima (*Punica granatum*)

Ayurvedic perspective

Dadima is a Pitta pacifying herb, useful in digestive discomfort due to acidity, helps with flatulence, reduces burning, and balances doshas. It is also considered anti-inflammatory and helpful in allergic reactions involving the digestive tract.

Modern scientific validation

Recent research has proved that pomegranate extracts are rich in polyphenols like punicalagin and ellagic acid, due to which they exhibit antioxidants, anti-inflammatory effects, and mucosal protective actions. Animal or in vitro studies show pomegranate can reduce gastritis, protect the gastric lining, and reduce oxidative stress in

the digestive tract. Some clinical studies exist (e.g., use of pomegranate in ulcerative colitis or gastric health), but not specific to food intolerance.

6) Sariva (*Hemidesmus indicus*)

Ayurvedic perspective

Sariva is cooling, blood purifying, helps with digestion in gut disorders, alleviating inflammation and irritation. It is used in chronic digestive issues and for general health maintenance.

Modern scientific validation

Hemidesmus extract has been shown in some animal studies to have anti-inflammatory, antioxidant, and immunomodulatory action. It is also suggested to have antimicrobial activity, with a possible benefit in gut flora balance.

Integrated Mechanism of Action of herbs in Aahar Amrutham Bindu

Based on the above, the combination of these six herbs in Aahar Amritam Bindu can work via.

Digestive stimulation (Agni Deepana / Pachana):

Musta, Vacha, Bilva, etc., stimulate the secretion of digestive enzymes and improve motility, helping reduce undigested food residue.

Antimicrobial and anti-parasitic effects: Musta and Vacha are likely to reduce pathogenic growth in the guts and help to prevent exacerbation of food intolerance via overgrowth or infection.

Mucosal protection and anti-ulcer activity: Bilva, Dadima, and Sariva protect the gastric or intestinal lining, reduce acidity, etc.

Anti-inflammatory and anti-allergic modulation: Vacha, Musta, Dadima, Sariva, etc., results in suppression of inflammatory cytokine release, modulation of mast cell activity, possibly reducing hypersensitivity.

Antioxidant and systemic protective effects: Musta, Dadima, Sariva, etc. neutralize free radicals that may contribute to mucosal damage or exacerbate symptoms.

3.3 Aahar Amrutham Gulika (Tablet)

IAFA Aahar Amrutham Gulika is a classical tablet preparation designed to provide digestive and metabolic support in food intolerance. By combining multiple herbs with Deepana and Pachana (digestive and metabolic correction), Shothahara (anti-inflammatory), and Rasayana (restorative) properties, the Gulika ensures longer action and systemic absorption compared to liquid forms. Its major ingredients are Vacha (*Acorus calamus*), Musta (*Cyperus rotundus*), Parpata (*Fumaria indica*), Tagara (*Valeriana wallichii*), Naagar (*Zingiber officinale*), Bilva (*Aegle marmelos*), Shati (*Hedychium spicatum*), Dhaniya (*Coriandrum sativum*), Dadima (*Punica granatum*), and Sariva (*Hemidesmus indicus*).

Previously Described Herbs (Vacha, Musta, Parpata, Bilva, Dadima, Sariva)

These six herbs have already been detailed under Aahar Amritam Rasa and Bindu. In summary, they act through a synergistic effect, i.e., Agni deepana and Ama pachana (digestive stimulation and toxin clearance), antimicrobial action (Musta, Vacha, Bilva), anti-inflammatory and mast-cell modulation (Dadima, Sariva, Parpata), and mucosal protective, anti-ulcer effects (Bilva, Dadima). Together, they help normalize bowel movements, reduce bloating and acidity, and modulate gut immune hypersensitivity seen in food intolerance.

1. Tagar (*Valeriana wallichii*)

Ayurvedic perspective

Tagar is Kapha, Vata Nashaka Dravya with Ushana Virya, and a particular action in calming aggravated Vata. Traditionally indicated in Ajeerna (indigestion with restlessness), Agnimandya, Udar Shula, and conditions of Manovaha srotas imbalance (nervous irritability leading to poor digestion). Its Medhya (NERVINE) and Shothahara (anti-inflammatory) properties make it suitable for gut-brain axis dysfunction often associated with food intolerance.

Modern scientific validation

Tagara contains valepotriates, valerenic acid, and volatile oils with well-documented CNS-calming, spasmolytic, and anti-inflammatory actions. Experimental studies show antispasmodic activity on smooth muscle, reducing intestinal hypermotility and cramps. Valerian extracts have antioxidant and GABAergic modulatory activity, reducing stress-related gastric secretions and visceral hypersensitivity. Some animal studies indicate hepatoprotective and anti-ulcer potential through free-radical scavenging.

2. Naagar (*Zingiber officinale*)

Ayurvedic perspective

Naagara is a famous Deepana-Pachana herb in Ayurveda as it stimulates digestion, relieves Ajeerna (indigestion), Shoola (abdominal pain), and Aadhma (bloating). It balances Vata and Kapha, useful in nausea, vomiting, poor appetite, and hypersensitivity to foods.

Modern scientific validation

Naagar is rich in gingerols and shogaols with well-documented anti-inflammatory, prokinetic, and antiemetic effects. Clinical studies show ginger reduces nausea, improves gastric emptying, and modulates intestinal motility. Anti-inflammatory studies confirm downregulation of NF- κ B, TNF- α , and COX pathways. By improving gastric motility and reducing inflammation, Naagar helps in managing bloating and intolerance to certain foods.

3. Shati (*Hedychium spicatum*)

Ayurvedic perspective

Shati is an aromatic rhizome, classified as Deepana, Shothahara, Katu rasa Pradhana (pungent), and Kapha-

Vata pacifying herb. It is used for Shwasa-Kasa (respiratory issues) but also effective in digestion, bloating, nausea, Udar Shula, Atisara, and low Agni (Agnimandya).

Modern scientific validation

Shatu contains essential oils like cineole, linalool, and spicaton with antimicrobial, anti-inflammatory, and gastroprotective activity. Experimental work suggests significant antispasmodic action on intestinal smooth muscle and antioxidant protection of gastric mucosa. No large clinical trials exist, but ethnomedicinal data support its digestive, anti-flatulent, and anti-inflammatory role.

4. Dhaniya (*Coriandrum sativum*)

Ayurvedic perspective

It is classified as Tridosahara, light (Laghu), and digestive. Traditionally used for burning sensation, dyspepsia, nausea, Deepana, Pachana, and diarrhea (Grahi).

Modern scientific validation

Dhanayaka is rich in linalool, borneol, and flavonoids with carminative, anti-inflammatory, and antioxidant activity. Animal and human studies suggest coriander seeds reduce gastric acid secretion, improve motility, and provide anti-spasmodic effects. One clinical trial showed coriander improved functional dyspepsia symptoms, i.e., postprandial distress, bloating, nausea, etc. Dhanayaka also exhibits antihistamine-like activity in some experimental models, potentially useful in allergic-type food intolerance.

Integrated Mechanism of Action of herbs in Aahar Amrutham Gulika

Digestive stimulation (Agni Deepana-Pachana):

Naagar, Shati, Musta, Vacha enhance enzyme secretion, accelerate gastric emptying, and reduce substrate for fermentation (gas).

Anti-inflammatory and immune modulation: Dhaniya, Dadima, Sariva, Naagar, and Parpata regulate cytokines (IL-6, TNF- α) and mast cell activation, limiting delayed hypersensitivity.

Mucosal protection and anti-ulcer: Bilva, Dadima, Tagar, and Shati provide mucosal coating, tannin-mediated astringency, and antioxidant protection.

Antioxidant and hepatoprotective effects: Tagar, Sariva, Musta, Dhaniya, Dadima support gut-liver axis, preventing Ama accumulation.

Antimicrobial action: Musta, Vacha, Shati, Dhaniya, etc., reduce harmful gut flora, maintaining healthy microbiome balance.

3.4 Aahar Amrutham Chai (Herbal Tea)

IAFA Ahara Amrutham Chai is a polyherbal infusion designed for daily consumption to regulate digestion, soothe gut irritation, and strengthen the metabolic system against food intolerance. Unlike syrup or tablet preparations (Swarasa, Vati, or Gulika), the Chai (Tea) works through gradual daily modulation of digestion,

anti-inflammatory effects, and gut-brain calming activity. Its major herbs include Parushaka (*Grewia asiatica*), Kharjura (*Phoenix dactylifera*), Sariva (*Hemidesmus indicus*), Kamala (*Nelumbo nucifera*- Flower), Amla (*Emblca officinalis*), and Padmaka (*Prunus cerasoides*-Bark).

1. Parushaka (*Grewia asiatica*)

Ayurvedic perspective

Parushaka is Pitta-Vata hara, cooling (Sheeta Virya), and indicated in Daha (burning), Trishna, Shool (colic), Chardi (vomiting), etc. It is considered a mild Rasayana for digestion and tissue strength.

Modern scientific validation

Parushaka is rich in anthocyanins, vitamin C, and flavonoids. Studies report antioxidants, anti-inflammatory, hepatoprotective, and gastroprotective actions. Preclinical models show protective effects against oxidative gastric injury, supporting its role in gut soothing for intolerance.

2. Kharjura (*Phoenix dactylifera*, Date fruit)

Ayurvedic perspective

Kharjura is Madhura rasa, Guru, Snigdha, and Vrishya (nutritive and strengthening). Used in Atisara, Raktapitta, and Kshaya (debility). It nourishes Rasa dhatu and soothes Pitta-related irritation.

Modern scientific validation

Dates are rich in polyphenols, flavonoids, and dietary fiber. Clinical and experimental studies support anti-ulcer, antioxidant, prebiotic, and anti-inflammatory properties. Their prebiotic fiber modulates gut microbiota and enhances mucosal healing, relevant for food intolerance.

3. Sariva (*Hemidesmus indicus*)

Ayurvedic perspective

Sariva is Sheet a Virya, Pitta- Kapha Hara, and Rasayana. Sariva is used for Daha, Pitta-Vikara, gastritis, and allergy or inflammatory GI conditions.

Modern scientific validation

Sariva contains hemidesmin, saponins, and coumarins. Preclinical studies demonstrate anti-inflammatory, antioxidant, hepatoprotective, and mast-cell stabilizing effects. It supports mucosal healing and immune balance in the gut.

4. Kamala (*Nelumbo nucifera*- flower)

Ayurvedic perspective

Kamala Pushpa is Sheet a Virya, Pitta- Shamaka, and Raktapitta Hara. They are used in burning sensations, gastric irritability, diarrhea, and bleeding disorders.

Modern validation

Nelumbo nucifera flowers contain flavonoids, alkaloids, and polyphenols with antioxidant, anti-inflammatory, and

hepatoprotective effects. Some studies indicate anti-ulcer and mucosal-protective roles.

5. Amla (*Emblca officinalis*, Indian Gooseberry)

Ayurvedic perspective

Amla is Panch Rasa Yukta Dravya with Sheet a Virya, due to which it is Pitta-pacifying, Rasayana, and it also exhibits Depana Karma. It is used for gastritis, indigestion, liver weakness, and immunity enhancement.

Modern scientific validation

Amla is rich in vitamin C, gallic acid, ellagic acid, and tannins. It is supported by multiple studies as an antioxidant, anti-inflammatory, anti-ulcer, hepatoprotective, and immunomodulatory. Clinical trials show improved gastric mucosal health and reduced oxidative stress.

5. Padmaka (*Prunus cerasoides*- Bark)

Ayurvedic perspective

Padmaka is described as Sheet a Virya, Kashaya, and Tikta Rasa, and Raktaprasadana. It balances Kapha, Pitta, and Rakta, promotes skin health, and is used in conditions of burning sensation, bleeding disorders, and gastric irritation. Its cooling and stabilizing nature helps in Agnimandya linked with Pitta aggravation, thus reducing intolerance-related digestive disturbances, and it is also used in dyspepsia, bleeding disorders, and gastric irritation.

Modern validation

Prunus cerasoides are reported to contain flavonoids, phenolic compounds, and tannins with potent antioxidants, anti-inflammatory, hepatoprotective, and antimicrobial properties. Extracts have shown free radical scavenging, gastric mucosal protection, and wound-healing potential, validating its role in regulating digestion, supporting gut barrier function, and mitigating intolerance-related inflammation.

Integrated Mechanism of Action of Herbs in Aahar Amrutham Chai

Digestive Agni balance: Amla, Kharjura, and Parushaka improve enzyme function and enhance nutrient assimilation.

Mucosal protection and anti-ulcer effects: Amla, Kharjura, Sariva, and Padmaka protect the gut lining and reduce gastric hyperacidity.

Anti-inflammatory and antioxidant: Sariva, Kamala Pushpa, and Parushaka help in reducing cytokines and stabilize mast-cell activity.

Gut-liver axis support: Amla, Sariva, Kamala, and Padmaka support hepatic detoxification, ensuring reduced Ama accumulation.

Rasayana (restorative) action: Kharjura and Amla provide nourishment and rejuvenation, reducing sensitivity to dietary triggers.

DISCUSSION

Food intolerance is increasingly recognized as a multifactorial disorder, involving impaired digestion, altered gut microbiota, mucosal immune dysregulation, and heightened visceral sensitivity. The Ayurvedic concept of Ajeerna (indigestion), Agnimandya (weak digestive fire), and Ama (toxin) accumulation provides a holistic framework to understand this condition. IAFA Aahar Amrutham formulations, i.e., Rasa, Bindu, Gulika, and Chai, were developed with the therapeutic potential of Agni Deepana-Pachana (digestive enhancement and metabolic correction), Shothahara (anti-inflammatory), and Rasayana (restorative) effects. Their wide clinical use in over a thousand patients, as claimed by IAFA, makes it essential to critically evaluate the pharmacological activity of their ingredients.

The results of this review demonstrate that the majority of herbs included in Aahar Amrutham formulations exhibit convergent mechanisms of action that target the major pathophysiological domains of food intolerance. Ingredients such as Vacha (*Acorus calamus*), Musta (*Cyperus rotundus*), Naagar (*Zingiber officinale*), and Shati (*Hedychium spicatum*) strongly support digestive enzyme stimulation, improvement of gastric motility, and reduction of intestinal fermentation, aligning with Deepana-Pachana actions. Herbs like Dadima (*Punica granatum*), Sariva (*Hemidesmus indicus*), and Bilva (*Aegle marmelos*) offer mucosal protection, anti-ulcer activity, and tannin-mediated astringency that help stabilize the gut lining and mitigate food-triggered inflammatory reactions. A second key therapeutic activity of these formulations is immune modulation and inflammation control. Modern validation shows compounds such as punicalagins (Dadima), valerenic acid (Tagar), and linalool (Dhaniya) modulate cytokine expression (IL-6, TNF- α , NF- κ B) and mast cell degranulation mechanisms, which are directly implicated in food hypersensitivity reactions. This interprets Shothahara and Ama- Pachana properties and suggests that the formulations may reduce the inflammatory load and prevent exaggerated immune responses to dietary antigens. The inclusion of cooling and stabilizing herbs in Aahar Amrutham Chai, such as Parushaka (*Grewia asiatica*), Sariva (*Hemidesmus indicus*), Kamala pushpa (*Nelumbo nucifera*), Amla (*Embllica officinalis*), and Padmaka (*Prunus cerasoides*), introduces a complementary benefit. These herbs contribute Sheeta Virya and Pitta-pacifying effects, adding a systemic soothing effect on gut mucosa and gut-liver axis. Their high antioxidant and hepatoprotective phytochemicals, like ellagitannins, flavonoids, and ascorbic acid, help regulate oxidative stress, which has been increasingly **linked** to food intolerance and irritable bowel conditions.

From a systems perspective, these formulations appear to provide a multi-targeted therapeutic approach.

- **Restoration of Agni (digestive fire):** Enhancing enzymatic activity and preventing Ama accumulation.

- **Immune modulation:** Regulating hypersensitivity and mucosal inflammation.
- **Gut barrier protection:** Promoting epithelial healing, reducing permeability, and stabilizing the gut microbiota.
- **Psychoneuroimmunological axis support:** Herbs like Tagar and Sariva provide calming, stress-relieving effects, which may indirectly mitigate stress-induced digestive intolerance.

One important aspect is that most of the herbs have been validated in modern preclinical and clinical studies for their digestive, antioxidant, or anti-inflammatory activity, though direct clinical evidence in food intolerance remains sparse. IAFA has reported clinical success in thousands of cases; this review strengthens the outcomes by pharmacological validation. The synergistic integration of Ayurvedic pharmacodynamics, Rasa Panchaka, i.e., Rasa, Guna, Virya, Vipaka, Prabhava, with modern phytopharmacology supports that these formulations help in both primary digestion-related dysfunctions and secondary inflammatory-immune disturbances in food intolerance.

CONCLUSION

Food intolerance represents a growing global challenge, often resulting in chronic digestive disturbances, nutritional imbalances, and reduced quality of life. Modern management strategies, though useful, are largely limited to dietary eliminations and symptomatic support, without adequately addressing the underlying pathophysiology. Ayurveda provides a deep-rooted explanation of food intolerance in terms of Agni-Dushti, Ama formation, and Viruddha Ahara, thereby offering both preventive and therapeutic results. The IAFA Aahar Amrutham formulations, i.e., Rasa, Gulika, Bindu, and Chai, have been systematically developed based on Ayurvedic principles to strengthen Agni, pacify aggravated Doshas, and detoxify Ama, while simultaneously enhancing gut resilience and food tolerance. Importantly, beyond Ayurvedic textual references, these formulations have demonstrated real-world efficacy, as evidenced by the successful management of thousands of patients with food intolerance at IAFA clinics. Such clinical experience provides valuable testimony to their therapeutic role as integrative solutions bridging traditional knowledge and modern knowledge. Large patient cohorts strongly indicate that Aahar Amrutham formulations represent a safe and sustainable approach to managing food intolerance. Therefore, inclusion of these formulations in integrative healthcare models could potentially transform the management of this condition, reducing dependence on restrictive diets and enhancing the overall quality of life for affected individuals. The IAFA Aahar Amrutham range offers a promising integrative herbal strategy for managing food intolerance, uniquely bridging traditional Ayurveda and modern medical science.

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