

PHARMACODYNAMICS OF LAVAN BHASKAR CHURNA: AN INTEGRATIVE AYURVEDIC AND BIOMEDICAL PERSPECTIVE**Dr. Anmol Sahu*², Dr. Swati Gupta¹, Dr. Prashant D. Math³**

^{1,2}Postgraduate Scholar, Department of Rasashastra and Bhaishajya Kalpana, Rani Dullaiya Smriti Ayurveda P.G Mahavidyalaya evam chikitsalaya Bhopal Madhya Pradesh.

³Professor, Department of Rasashastra and Bhaishajya Kalpana, Rani Dullaiya Smriti Ayurveda P.G Mahavidyalaya evam chikitsalaya Bhopal Madhya Pradesh.

Article Received on 05 August 2026,
Article Revised on 26 August 2026,
Article Published on 01 Sept. 2026,

<https://doi.org/10.5281/zenodo.22251835>

Corresponding Author*Dr. Anmol Sahu**

Postgraduate Scholar, Department of
Rasashastra and Bhaishajya
Kalpana, Rani Dullaiya Smriti
Ayurveda P.G Mahavidyalaya evam
chikitsalaya Bhopal Madhya
Pradesh.



How to cite this Article: Dr. Anmol Sahu*²,
Dr. Swati Gupta¹, Dr. Prashant D. Math³.
(2026). Pharmacodynamics of Lavan Bhaskar
Churna: An Integrative Ayurvedic And
Biomedical Perspective. World Journal of
Pharmaceutical Research, 15(17), 1411–1415.
This work is licensed under Creative Commons
Attribution 4.0 International license.

ABSTRACT

O9Lavan Bhaskar Churna (LBC) is a classical Ayurvedic polyherbo-mineral formulation extensively utilized in gastrointestinal disorders. Though not elaborated in Brihatrayi, it is well described in authoritative texts such as Chakradutta and Sharangadhara Samhita. The formulation comprises various lavana (salts) along with Deepana-Pachana herbs including Piper longum, Piper nigrum, Zingiber officinale, and Cuminum cyminum. Its pharmacodynamic action is primarily attributed to Agni deepana, Ama pachana, and Vata-Kapha shamana. Contemporary studies indicate that its ingredients enhance digestive enzyme secretion, improve bioavailability, stimulate bile flow, and exert anti-inflammatory and antioxidant effects. This review aims to critically analyze the pharmacodynamics of LBC by correlating classical Ayurvedic concepts with modern experimental and clinical evidence.

KEYWORDS: Lavan Bhaskar Churna, pharmacodynamics, Deepana-Pachana, Agni, Ama, carminative, bioenhancer.

INTRODUCTION

In Ayurveda, Agni plays a pivotal role in maintaining physiological homeostasis. Impairment of Agni (Agnimandya) leads to Ama formation, which is considered the root cause of many

diseases. Lavan Bhaskar Churna is a widely prescribed formulation indicated in Ajeerna, Gulma, Grahani, and Vibandha.

The formulation derives its name from “Lavana” (salt) and “Bhaskara” (sun), reflecting its potent Agni-stimulating capacity. It is composed of lavana dravyas and Ushna Virya herbs that collectively enhance digestion and correct metabolic disturbances. Recent scientific studies have validated the digestive stimulant and metabolic regulatory properties of its individual components, supporting its traditional use.

MATERIALS AND METHODS

This review is based on:

- Classical Ayurvedic texts (Chakradutta, Vangasena Samhita, Gadanigraha)
- Modern databases including PubMed
- Experimental and clinical studies on individual ingredients

Composition and Pharmaceutical Aspects

Lavan Bhaskar Churna contains

- **Lavana Dravyas:** Saindhava, Samudra, Vida Lavana
- **Katu-Tikta Dravyas:** Pippali, Maricha, Shunthi
- **Deepana-Pachana Dravyas:** Jeeraka, Dhanyaka
- **Sugandhita Dravyas:** Twak, Ela, Tamalapatra
- **Others:** Dadima, Nagakesara

Bhavana with lemon juice or buttermilk enhances bioavailability and therapeutic action.

Pharmacodynamics (Mode of Action)

1. Deepana and Pachana (Agni Stimulation)

The Ushna Virya and Laghu Guna of LBC stimulate Jatharagni, leading to enhanced digestion and metabolism. Modern studies demonstrate that spices like ginger and piperine significantly increase digestive enzyme activity, including lipase and disaccharidases, thereby improving nutrient breakdown.

2. Enhancement of Digestive Enzymes

Experimental studies show that piperine, ginger, and cumin stimulate pancreatic enzymes such as amylase, lipase, trypsin, and chymotrypsin, contributing to improved digestion.

3. Carminative and Antispasmodic Action

Volatile oils and alkaloids present in the formulation reduce intestinal spasms and gas formation. This aligns with the Ayurvedic concept of Anulomana, facilitating downward movement of Vata and relieving abdominal distension.

4. Bile Secretion and Lipid Digestion

Dietary spices present in LBC enhance bile secretion and increase bile acid concentration, thereby improving fat digestion and absorption.

5. Bioavailability Enhancement

Piperine, a $\text{C}_{15}\text{H}_{15}\text{NO}_2$ component of Piper species, acts as a bioenhancer by inhibiting cytochrome P450 enzymes and P-glycoprotein, leading to increased intestinal absorption and systemic availability of nutrients and drugs.

6. Anti-inflammatory and Antioxidant Activity

Ingredients such as ginger, cinnamon, and pomegranate exhibit significant anti-inflammatory and antioxidant effects, reducing mucosal irritation and oxidative stress in the gastrointestinal tract. Additionally, Piper longum demonstrates broad pharmacological actions including antioxidant and anti-inflammatory effects.

7. Hepatoprotective and Metabolic Effects

Recent experimental studies indicate that ginger and black pepper improve hepatic and renal function and reduce lipid abnormalities, suggesting systemic metabolic benefits beyond digestion.

8. Mild Laxative and Detoxifying Action

The lavana components exert osmotic effects that facilitate bowel movement and elimination of Ama, correlating with Mridu Virechana action described in Ayurveda.

9. Dosha Modulation

LBC pacifies Vata and Kapha dosha by:

- Regulating intestinal motility (Vata)
- Reducing mucus secretion (Kapha)

This restores functional balance in the gastrointestinal tract.

Ayurvedic Pharmacological Attributes

Parameter	Description
Rasa	Lavana predominant with Katu
Guna	Laghu, Ruksha
Virya	Ushna
Vipaka	Katu
Dosha Karma	Vata-Kapha Shamana
Srotas	Annavaha, Purishavaha

Clinical Applications

Lavan Bhaskar Churna is indicated in:

- Agnimandya (loss of appetite)
- Ajeerna (indigestion)
- Gulma (abdominal distension)
- Grahani (malabsorption syndrome)
- Vibandha (constipation)
- Arsha (hemorrhoids)

It also shows potential benefits in respiratory disorders due to Kapha-reducing action.

DISCUSSION

The pharmacodynamics of LBC demonstrate a strong correlation between Ayurvedic principles and modern biomedical mechanisms. Its Deepana-Pachana action corresponds to stimulation of digestive enzymes and bile secretion. The concept of Ama pachana aligns with detoxification and improved metabolic efficiency. Additionally, the presence of bioactive compounds such as piperine provides a scientific basis for enhanced bioavailability and therapeutic synergy.

Lifestyle factors such as irregular diet, stress, and sedentary habits contribute significantly to digestive disorders. LBC addresses these root causes by restoring Agni and balancing doshas, making it a valuable formulation in contemporary practice.

CONCLUSION

Lavan Bhaskar Churna exhibits a multifaceted pharmacodynamic profile integrating classical Ayurvedic concepts with modern pharmacological mechanisms. It enhances digestion, improves metabolic processes, regulates gut motility, and exerts anti-inflammatory and antioxidant effects. Scientific validation of its ingredients further supports its therapeutic efficacy. However, caution is required in patients with hypertension or salt-restricted

conditions due to its high sodium content.

REFERENCES

1. Mishra SN. *Bhaishajya Ratnavali*. Varanasi: Chaukhamba Surbharati, 2015.
2. Tripathi H. *Vangasena Samhita*. Varanasi: Chaukhamba Sanskrit Series, 2016.
3. Tripathi I. *Gadanigraha*. Varanasi: Chaukhamba Sanskrit Sansthana, 2003.
4. Platel K, Srinivasan K. Influence of dietary spices on digestive enzymes. *Int J Food Sci Nutr.*, 1996; 47(1): 55–59.
5. Platel K, Srinivasan K. Influence of spices on pancreatic enzymes. *J Nutr Biochem*, 2000.
6. Prakash UN, Srinivasan K. Fat digestion and absorption in spice-pretreated rats. *J Sci Food Agric*, 2012; 92(3): 503–510.
7. Tripathi D, et al. Piperine as a bioenhancer: mechanisms and applications. *Pharm Res.*, 2025.
8. Bhatia A, et al. Therapeutic potential of Piper longum. *J Ethnopharmacol*, 2026.
9. Yashwanthkumar MH, et al. Ginger and black pepper in metabolic disorders. *Lipids.*, 2026; 61(2): 217–227.
10. Majeed M, et al. Curcuminoids and piperine in liver disorders: RCT. *Front Nutr.*, 2023; 10: 1201186.