

**“A COMPARATIVE STUDY ON THE EFFICACY OF
HOMOEOPATHIC MEDICINE NATRUM CARBONICUM VERSUS
DIET & REGIMEN IN THE MANAGEMENT OF IBS AMONG
MIDDLE-AGED MALES: A RANDOMIZED CONTROLLED TRIAL.”**

Dr. Rathirupa,^{*1} Dr. Santosh Kumar A. Gite,² Dr. Maheshkumar A. Gite²

¹M.D. (Hom.) Part-II Scholar, Department of Practice of Medicine Ananya College of
Homoeopathy, Kalol, Gujarat.

²MD, Ph.D. (Homoeopathy) MBA.

Article Received: 12 June 2026, Article Revised: 02 July 2026, Published on: 22 July 2026

***Corresponding Author: Dr. Rathirupa**

M.D. (Hom.) Part-II Scholar, Department of Practice of Medicine Ananya College of Homoeopathy, Kalol, Gujarat.

Doi: <https://doi-doi.org/101555/ijarp.2803>

ABSTRACT

Background

Irritable-Bowel-Syndrome (IBS) is a highly prevalent gastrointestinal disorder that significantly impairs quality of life, particularly among middle-aged males facing high occupational and lifestyle stressors. While conventional options offer symptomatic management, this study aimed to evaluate the comparative efficacy of the individualized homeopathic remedy *Natrum carbonicum* against standard diet and regimen alterations in middle-aged males diagnosed with IBS. [1, 2]

Methods

A randomized, controlled clinical trial was conducted over a 12-month period at an outpatient research facility. Sixty (60) middle-aged male participants (aged 40–60 years) meeting the Rome IV diagnostic criteria for IBS were randomized in a 1:1 ratio into two parallel arms. Group A (n=15) received individualized doses of *Natrum carbonicum* (primarily in 30C or 200C potencies) alongside basic dietary advice. Group B (n=15) received standard structured diet and regimen interventions (including a low-FODMAP diet, increased soluble fiber, regular physical activity, and stress-management habits) without any medicinal intervention. The primary clinical outcome was the mean change in the IBS Severity Scoring System (IBS-

SSS) from baseline to 3 and 6 months. Secondary outcomes included alterations in the IBS-Quality of Life (IBS-QoL) questionnaire.

KEYWORDS: Homeopathy; *Natrum carbonicum*; Irritable-Bowel-Syndrome; Diet and Regimen; Middle-Aged Males; Randomized Controlled Trial.

INTRODUCTION

Irritable Bowel Syndrome (IBS) is a highly prevalent, chronic functional gastrointestinal disorder characterized by recurrent abdominal pain associated with defecation or alterations in bowel habits, such as diarrhea, constipation, or alternating bowel patterns (1). Globally, IBS affects approximately 4.1% to 11% of the population depending on the diagnostic criteria used, imposing a substantial socioeconomic burden and drastically diminishing health-related quality of life (2,3). While epidemiological data shows variations in gender distribution, middle-aged males often present with unique clinical challenges (4). In this demographic, the severity of IBS symptoms is frequently compounded by modern occupational stressors, high-pressure environments, altered circadian rhythms, and poor dietary habits, leading to chronic visceral hypersensitivity and dysregulated gut-brain interactions (4,5).

The current diagnostic standard, the Rome IV criteria, classifies IBS based on predominant bowel patterns into constipation-predominant (IBS-C), diarrhea-predominant (IBS-D), mixed (IBS-M), or unclassified (IBS-U) subtypes (1,6). Conventional pharmacological management focuses primarily on symptomatic control using laxatives, antidiarrheals, antispasmodics, or low-dose antidepressants (3,7). However, these interventions often yield inconsistent efficacy, carry notable side-effect profiles, and fail to address the underlying pathophysiological mechanisms (7). Consequently, contemporary guidelines place significant emphasis on non-pharmacological approaches, specifically structured diet and regimen protocols (8). Interventions such as the low-FODMAP (Fermentable Oligosaccharides, Disaccharides, Monosaccharides, and Polyols) diet, high soluble-fiber intake, regular physical exercise, and structured stress-management routines have demonstrated considerable success in stabilizing the gut microbiota and mitigating somatic symptoms (8,9).

Despite the utility of lifestyle modifications, many patients experience difficulty maintaining strict dietary restrictions or fail to achieve complete clinical remission, driving interest toward complementary and integrative therapeutic models (10). Homeopathy offers a highly individualized holistic approach, treating functional gastrointestinal disorders not as isolated organ pathologies but as localized expressions of systemic constitutional imbalances (11).

Within classical homeopathic therapeutics, *Natrum carbonicum* is recognized as a deep-acting remedy with a profound affinity for the gastrointestinal tract (12). It is classically indicated for individuals presenting with marked digestive weakness, severe post-prandial distress, and a distinct inability to tolerate specific foods—particularly dairy and starches—symptoms that closely mirror the clinical presentation of food-intolerant IBS patients (12,13). Furthermore, its pathogenic profile directly targets the psychological components of gastrointestinal distress, matching the hypochondriacal anxiety, mental fatigue, and stress-induced somatic symptoms frequently observed in middle-aged males (13,14).

While existing literature validates the role of diet and regimen in managing functional bowel disorders, and individualized homeopathy has shown promise in generalized gastrointestinal trials, direct comparative evidence remains scarce. Specifically, randomized controlled trials evaluating a targeted homeopathic medicine like *Natrum carbonicum* against standard dietary and lifestyle interventions within a specific demographic are absent. This study aims to fill this empirical gap by conducting a randomized controlled trial to compare the clinical efficacy of *Natrum carbonicum* versus structured diet and regimen in the management of Irritable-Bowel-Syndrome among middle-aged males.

MATERIALS AND METHODS

Study Design

A prospective, randomized, open-label, parallel-group controlled clinical study was conducted over a 12-month period at Adarsh Homoeopathic Hospital attached to ACH, Kalol.

Participants and Eligibility Criteria

A total of 30 middle-aged male participants were recruited from outpatient clinics and community health screenings.

- **Inclusion Criteria**

- Males aged between 40 and 60 years.
- Clinically diagnosed with Irritable-Bowel-Syndrome (IBS) satisfying the Rome IV diagnostic criteria.
- Baseline IBS Severity Scoring System (IBS-SSS) score ≥ 75 (indicating mild to severe disease).

- **Exclusion Criteria**

- Presence of "alarm symptoms" or red flags (e.g., unexplained weight loss, nocturnal diarrhea, rectal bleeding, or family history of colorectal cancer).

- Diagnosed organic gastrointestinal diseases (e.g., Celiac disease, Crohn's disease, Ulcerative Colitis, or active peptic ulcers).
- Major systemic psychiatric disorders or concurrent severe hepatic, renal, or cardiac illness.
- History of major abdominal surgery (excluding appendectomy).
- Use of conventional drugs for IBS (e.g., antispasmodics, laxatives, or tricyclic antidepressants) within 2 weeks prior to enrollment.

Randomization and Allocation

The 30 eligible participants were randomly assigned in a strict 1:1 ratio into two parallel groups using a computer-generated block randomization schedule:

- **Group A (Natrum carbonicum Group, n=15):** Received the homeopathic medicine alongside basic healthy eating tips.
- **Group B (Diet and Regimen Group, n=15):** Received structured dietary and lifestyle interventions alone.

Allocation concealment was achieved using sequentially numbered, opaque, sealed envelopes managed by an independent supervisor who was not involved in participant assessment.

Interventions

- **Group A (Medicinal Arm):** Participants received homeopathic *Natrum carbonicum* prepared according to official Pharmacopoeia standards. The medicine was administered orally using cane sugar globules (Size 30) or liquid dilutions. Potencies (30C or 200C) and dosage frequencies were selected individually for each participant based on the baseline severity of gastrointestinal symptoms and homeopathic principles. Doses ranged from once daily to once weekly.
- **Group B (Non-Medicinal Arm):** Participants received no medication. Instead, they were placed on a highly structured diet and regimen protocol. This included:
 - A modified low-FODMAP diet restricting trigger foods like onions, garlic, wheat, and dairy.
 - Increased daily intake of soluble dietary fiber.
 - A regular exercise regimen consisting of a minimum of 30 minutes of moderate-intensity brisk walking, 5 days per week.
 - Structured stress-management advice including regular sleep hygiene routines.

Outcome Measures

Clinical assessments were conducted at baseline, 1 month, 3 months, and 6 months.

- **Primary Outcome Measure:** The change in the total score of the IBS Severity Scoring System (IBS-SSS). This instrument evaluates five clinical items: severity of abdominal pain, frequency of abdominal pain, severity of abdominal distension/bloating, dissatisfaction with bowel habits, and interference with life. Each item is scored from 0 to 100, yielding a maximum score of 500.
- **Secondary Outcome Measure:** The change in the total score of the IBS-Quality of Life (IBS-QoL) questionnaire, assessing the impact of the interventions on physical, social, and emotional well-being.
- **Safety Monitoring:** Documentation of any unwanted symptoms or adverse events reported during the follow-up period.

RESULTS

All 30 participants completed the 6-month trial with 0% attrition. Baseline demographic and clinical profiles showed no statistically significant differences between the two study arms ($p > 0.05$), demonstrating successful allocation. Diarrhea-predominant IBS (IBS-D) was the most frequent subtype in both groups.

Baseline Variable	Group A: <i>Natrum carb</i> (n=15)	Group B: Diet & Regimen (n=15)	p-value
Age years, (Mean $\pm$ SD)	(48.6 $\pm$ 5.2)	(49.3 $\pm$ 4.9)	0.709
IBS Subtype	(53.3%)	(60.0%)	0.916
Baseline IBS-SSS (Mean $\pm$ SD)	(284.5 $\pm$ 42.1)	(279.8 $\pm$ 38.6)	0.751
Baseline IBS-QoL (Mean $\pm$ SD)	(44.2 $\pm$ 8.5)	(45.6 $\pm$ 7.9)	0.643

Primary Outcome: Irritable Bowel Syndrome Severity Scoring System (IBS-SSS)

Both interventions led to a decline in IBS symptom severity over the 6-month follow-up. Paired 't-tests' indicated that both groups achieved statistically significant internal improvements from baseline to month 6 ($p < 0.001$).

However, intergroup analysis using the Independent Samples 't-test' revealed that Group A experienced a significantly greater reduction in symptom severity compared to Group B. At month 3, the mean IBS-SSS score was (182.4 $\pm$ 28.6) in Group A versus (210.5 $\pm$ 32.1) in Group B ($p=0.016$). By month 6, Group A achieved a mean score of **(118.2 $\pm$ 22.4)** (indicating mild or sub-clinical state), whereas Group B stood at **(164.8 $\pm$ 29.5)** ($p < 0.001$).

Abdominal Bloating & Gas: Group A demonstrated superior relief from post-prandial abdominal distension compared to Group B ($p = 0.004$).

Food Intolerance Distress: Group A showed a profound reduction in milk/lactose-induced digestive distress, matching the therapeutic pathogenesis of *Natrum carbonicum*.

Secondary Outcome: IBS-Quality of Life (IBS-QoL):

Gastrointestinal health restoration directly improved health-related quality of life. Group A experienced highly significant improvements across physical and psychological domains compared to the lifestyle modification cohort.

- **Group A (*Natrum carb*):** Mean IBS-QoL score increased significantly from (44.2 ± 8.5) at baseline to (76.8 ± 6.9) at month 6 ($p < 0.001$).
- **Group B (Diet & Regimen):** Mean IBS-QoL score improved from (45.6 ± 7.9) at baseline to (61.4 ± 7.4) at month 6 ($p < 0.001$).
- **Intergroup Difference:** The final quality of life score was significantly higher in the homeopathic treatment arm ($p < 0.001$).

ACKNOWLEDGEMENTS

I express my deepest sense of gratitude to my esteemed guide, **Dr. Chirag Prajapati, M.D. (Hom.)**, Professor, Department of Practice of Medicine, Ananya College of Homoeopathy, Kalol, Gujarat, for his invaluable guidance, constant supervision, and scholarly insights throughout the course of this research study. His expertise in clinical research and unwavering encouragement were instrumental in shaping this randomized controlled trial.

I am highly indebted to **Dr. Arif Masood**, Honourable Principal and Dean of Ananya College of Homoeopathy, Kalol, Gujarat, for providing the necessary institutional facilities, infrastructure, and a highly conducive academic environment that permitted the successful completion of this clinical trial.

I extend my sincere thanks to the faculty members and clinical staff of the **Department of Practice of Medicine** for their constant administrative assistance, technical cooperation, and support during the participant screening and data collection phases.

Most importantly, I am profoundly grateful to the **30 participants** who volunteered for this comparative study. Their regular attendance, compliance with the trial protocols, and cooperative spirit were fundamental to evaluating these therapeutic interventions.

Finally, I owe a special debt of gratitude to my family, peers, and well-wishers for their infinite patience, moral support, and motivation throughout my journey as an **M.D. (Hom.) Part-II student**.

DISCUSSION

Natrum carbonicum is a deep-acting remedy historically noted for a profound and specific affinity for the gastrointestinal mucous membranes and the vegetative nervous system. The core pathogenic profile of this remedy perfectly aligns with the classic clinical presentation of modern IBS, characterized by:

Marked Digestive Weakness and Flatulence: The *Natrum carb* patient experiences severe distress, bloating, and sour eructations after eating, with an abdomen that feels constantly distended and heavy.

Specific Food Intolerances: A hallmark indication for this remedy is a distinct, severe inability to tolerate milk or dairy products—often resulting in sudden, urgent diarrhea immediately following ingestion—as well as distress from starches and processed foods. This matches the high prevalence of perceived food intolerances in the middle-aged male IBS-D population.

The Gut-Brain Axis and Psychological Profiling: Middle-aged males frequently experience IBS flare-ups compounded by professional anxiety, chronic mental fatigue, and stress. Clinically, the *Natrum carb* state is characterized by an inability to perform mental labor, extreme mental sluggishness, and a mild, hypochondriacal disposition that makes the individual highly sensitive to environmental stressors.

CONCLUSION

The findings of this randomized controlled trial demonstrate that individualized homeopathic treatment with *Natrum carbonicum* possesses superior clinical efficacy compared to standard structured diet and regimen interventions alone in managing Irritable-Bowel-Syndrome (IBS) among middle-aged males. Over the 6-month study period, the *Natrum carbonicum* cohort achieved a highly significant reduction in the total Irritable Bowel Syndrome Severity Scoring System (IBS-SSS) score, effectively shifting participants from moderate-to-severe symptomatic states into mild or sub-clinical remissions. The medicine showed distinctive therapeutic superiority in mitigating post-prandial abdominal distension, gas production, and food-induced gastrointestinal distress, directly validating its specific clinical pathogenesis.

REFERENCES

1. Lacy BE, Mearin F, Chang L, Chey WD, Lembo AJ, Simren M, et al. Bowel disorders. *Gastroenterology*. 2016;150(6):1393-407.
2. Oka P, Parr H, Barberio B, Black CJ, Savarino EV, Ford AC. Global prevalence of irritable bowel syndrome according to Rome III or Rome IV criteria: a systematic review and meta-analysis. *Lancet Gastroenterol Hepatol*. 2020;5(10):908-17.
3. Enck P, Aziz Q, Barbara G, Farmer AD, Fukudo S, Mayer EA, et al. Irritable-bowel-syndrome. *Nat Rev Dis Primers*. 2016; 2:16014.
4. Chang L. The role of gender and sex in irritable bowel syndrome. *Gastroenterol Clin North Am*. 2011;40(1):141-53.
5. Schmulson MJ, Drossman DA. What is new in Rome IV. *Rev Gastroenterol Mex*. 2017;82(1):73-86.
6. Ford AC, Lacy BE, Harris LA, Quigley EMM, Moayyedi P. Effect of antidepressants and psychological therapies in irritable bowel syndrome: an updated systematic review and meta-analysis. *Am J Gastroenterol*. 2019;114(1):21-39.
7. Dionne J, Ford AC, Yuan Y, Chey WD, Lacy BE, Saito YA, et al. A systematic review and meta-analysis evaluating the effectiveness of a gluten-free diet and a low-FODMAP diet in hurting symptoms of irritable bowel syndrome. *Am J Gastroenterol*. 2018;113(9):1290-300.
8. Johannesson E, Ringström G, Abrahamsson H, Sadik R. Physical activity improves symptoms in irritable bowel syndrome: a randomized controlled trial. *Am J Gastroenterol*. 2011;106(5):915-22.
9. Grundmann O, Yoon SL. Complementary and alternative medicines in irritable bowel syndrome: an integrative view. *World J Gastroenterol*. 2014;20(2):346-62.
10. Hahnemann S. *Organon of medicine*. 6th ed. Kunzli J, Naude A, Pendleton P, translators. New Delhi: B. Jain Publishers; 2002.
11. Boericke W. *Pocket manual of homoeopathic materia medica & repertory*. 9th ed. New Delhi: B. Jain Publishers; 2005.
12. Kent JT. *Lectures on homoeopathic materia medica*. New Delhi: B. Jain Publishers; 2007.
13. Allen HC. *Keynotes and characteristics with comparisons of some of the leading remedies of the materia medica*. New Delhi: B. Jain Publishers; 2002.