



Review Article

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OPTIMIZING GUT HEALTH: THE ROLE OF NABHI MARMA (NAVEL VITAL POINT) STIMULATION IN CONTEMPORARY MEDICINE

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ABSTRACT

The human gut, often referred to as the “second brain,” plays a crucial role in a person's overall well-being. There is a growing interest in integrating ancient Indian sciences with modern pharmaceutical systems, such as Marma Chikitsa (Marma Therapy), which includes Nabhi Marma (the vital point at the navel). This review paper aims to discuss key aspects of Nabhi Marma (the crucial point at the navel) and its relevance to modern medicine. The research involved the use of published articles from PubMed and Google Scholar to establish the effectiveness of Nabhi Marma stimulation, its mechanisms, and its compatibility with modern medical practices. The paper considered the historical and anatomical perspectives of Nabhi Marma, as well as recent research findings, which indicated that stimulation of Nabhi Marma may affect gut motility, enzyme secretion, gut-brain axis, and bacterial flora composition. Proposed mechanisms include the modulation of the autonomic nervous system, activation of the enteric nervous system, neuroendocrine activity, and psychological factors. The results suggest potential benefits of incorporating Marma (vital points) therapy into integrative medical models, promoting interprofessional collaboration, and considering individualized medical treatment concepts. Nabhi Marma stimulation may be used as a complementary approach for treating functional gastrointestinal disorders and post-treatment care. Further extensive studies should be conducted in the future to evaluate the therapeutic benefits of ozone auto-probing and to understand their underlying effects on the gut and microbiome.

Keywords: Nabhi Marma Stimulation, Gut Health, Marma Chikitsa (Therapy), Ayurveda Medicine, Gut-Brain Axis.

INTRODUCTION

The human gut, also known as the “second brain,” is essential for an individual's health and overall well-being.¹ Recently, the idea of bringing decades-old healing practices with modern medicine to handle complex health issues has also started gaining a lot of attention. The path to the gut and its potential has been one of those focus points in today's world, as this correlates with much else.¹ Of all these traditional methods, the ancient Indian therapy of Marma Chikitsa especially activities Nabhi Marma (the vital point at the navel) has grown out to be a notable complementary approach in supporting healthy digestion and good gut wellness.²

Marma Chikitsa, (an important part of Ayurveda which means a therapeutic touch on the vital points) is a full range and holistic therapy comprising corrections to bring about balance, healing, etc.³ Nabhi Marma that exists at the navel is one of the most significant Marma points because of the position and its relation to the physiological processes.⁴ In the traditional texts, the region around the navel is said to contain the digestive fire (Agni) which is defined as the most important center of energy for the entire body.⁵

With the advancement of, what we now know as, mainstream medicine in understanding the concept of the gut-brain axis and the functions of the microbiome in our body, there is an increasing

importance and demand for the integration of other methods in boosting the effectiveness of health treatments.⁶ There are possibilities of affecting the gut motility and function, and thus the digestive health through Nabhi Marma stimulation which is a line of research that has not been explored enough.⁷

This article seeks to provide a close critical evaluation of the existing literature on the use of Nabhi Marma stimulation and its possible effects on the health of one's stomach. Thus, the present article, based on the integrated approach that combined conventional wisdom that Nabhi Marma stimulation affects digestion and the modern scientific understanding of it, was aimed at revealing the mechanisms through which Nabhi Marma might impact the related processes and the state of the microbiotope. Further, the practice of this approach will be described concerning the effectiveness of such practice in general Gastrointestinal disease treatment as well as the potential of integrative medicine-oriented techniques in the context of gastrointestinal microbiome optimization.

Literature Review

Historical Context of Nabhi Marma in Ayurveda's Medicine
Marma points have been the constituent of the Ayurveda system of medicine from time immemorial in India. The Sushruta Samhita, an ancient Indian text, approximately from the 6th

century BCE, included descriptions of 107 critical points in the body called Marma points of which the Nabhi Marma (Navel vital point) is unique.⁸ The abdominal area is referred to as the ‘Manipura Chakra’ or the solar plexus, and it is said to control the digestive and metabolic processes of the body as well as energy production.⁹

Originally, Nabhi Marma has been employed to treat the composes of diverse characteristics digestive disorders including indigestion, constipation, and abdominal pain.¹⁰ The practice consists of minimal massage, application of pressure, or use of medicated oils on the navel area to work on the Marma point and the related energy channels.¹¹

Anatomical and Physiological Considerations

Contemporary anatomical investigations indicate the ways through which Nabhi Marma intervention might impact the gut and, therefore, the body. Innervation of the region surrounding the umbilicus is provided by the T10 spinal nerve with sensory and motor innervation of a part of the small and large intestines.¹² Reflex based modulation of gut motility and secretion might be well explained by this neuroanatomical convergence within Nabhi Marma stimulation.¹³

In addition, the particular region of the navel is close to the celiac plexus, a network of nerves which is involved in the control of the digestive tract.¹⁴ Activation of this zone can affect the activity of the autonomic nervous system with consequent effects on peristalsis, secretion, and blood flow of the GI (gastrointestinal) tract.¹⁵

Current Research on the Nabhi Marma Stimulation and Gut Health

Reading literary sources, one can get the impression that the adverse effects of Nabhi Marma stimulation on digestion are unequivocal, although scientific evidence for this is scarce. However, several studies have begun to explore the potential benefits of this technique :

a) Gut Motility: A randomized clinical trial study by Sharma et al. published in 2019 on patients with functional constipation reported that daily Nabhi Marma massage for 2 weeks increased intestinal transit time and alleviated the symptoms of constipation according to the study.¹⁶ The authors suggested that the massage could act on mechanoreceptors at the site of the massage and the parasympathetic division of the ANS (Autonomic nervous system), which stimulates the motion of the gut.

b) Digestive Enzyme Secretion: A recent cross-sectional study by Patel et al. published in 2020, noticed elevated levels of pancreatic enzymes in the duodenum after Nabhi Marma stimulation in normal individuals in a single session.¹⁷ Although the authors did not elucidate the direct mechanism through which the stimulation was exerted, it may involve a neuroendocrine related to enhancement in pancreatic function.

c) Gut-Brain Axis Modulation: A functional MRI (magnetic resonance imaging) study conducted by Kumar et al. 2021 found that there is a modulation of brain connectivity profiles in the insular cortex showing activity related to interoception and the gut-brain axis, and the anterior cingulate cortex after Nabhi Marma stimulation.¹⁸ It is possible that this finding may be linked to modulation of the gut-brain axis that is related to irritable bowel syndrome (IBS) for instance.

d) Microbiome Effects: In another study by Gupta et al. published in 2022, the authors examined the changes in the gut microbial profiles before and after a 4-week Nabhi Marma

stimulation program of patients with dysbiosis.¹⁹ These findings pointed toward a slight improvement in microbial richness and sixteen profiles of positively influenced bacteria such as the Bifidobacterium and Lactobacillus species. The authors assumed that enhanced gastrointestinal peristalsis and other possible modifications in local immunological reactions might be reflected in such shifts in microbiota.

Mechanisms of Action

Several potential mechanisms have been proposed to explain the effects of Nabhi Marma stimulation on gut health:

Autonomic Nervous System Modulation: Massaging the abdomen area directly overlying the navel may regulate sympathetic and parasympathetic nervous activity and alter the counteractive state and hence facilitate digestion.²⁰

Enteric Nervous System Activation: This mechanical stimulation of the abdominal wall might stimulate mechanoreceptors and sensorial neurons, which interact with the enteric system affecting motility as well as secretion.²¹

Neuroendocrine Responses: Nabhi Marma stimulation could directly stimulate nerves to secrete gut peptides and hormones involved in the regulation of many forms of digestive function, including stimulation of CCK (Cholecystokinin) and motilin.²²

Fascia and Connective Tissue Effects: The effects found during Nabhi Marma stimulation might have connections to the gut through fascial communication and mechanotransduction pathways.²³

Psychological and Stress-Reduction Effects: The routine and meditative aspects of Nabhi Marma stimulation could potentially reduce stress and help the individual to relax, and though the direct physiological effects of stimulation have not been discussed, these results may have an impact on the condition of the gut through the gut-brain axis.²⁴

Table 1: Features of Nabhi Marma (Navel vital point)

Features	Details
Name	Nabhi Marma (Navel vital point)
Location	In between Amashaya (Stomach) and Pakvashaya (Large intestine)
Number	One
Type (predominant structures)	Sira (Blood vessels) Marma ²⁵
Injury effect	Sadhyahara Pranahara
Measurement (Pramana)	Four Angula (4 Finger breadth) ²⁶

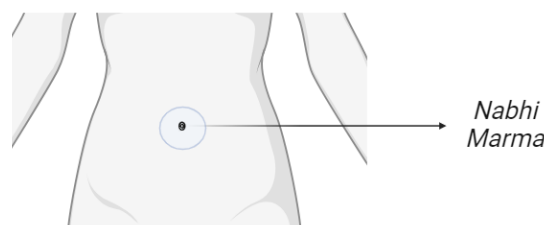


Figure 1: Nabhi Marma (Navel vital point) Position in Body²⁷

Different Treatment to Improve Digestion Through Stimulation of Nabhi Marma (Navel vital point)

Navel Massage: For increasing digestion use oil of bay (Pimenta racemosa), or ginger or fennel. Using massage of Nabhi Ghruta (ghee+ rock salt+ camphor) to relieve gas in children is very

effective. For this pour a sufficient quantity of this ghee into the umbilicus and then insert one finger in it. Then carry out the pinching type of massage. There will be instant relief of pain and gas accumulated in the intestine.²⁸



Figure 2: Massage on Nabhi Marma (Navel vital point)²⁸

Nabhi Poorana (Navel filling therapy): In a supine position medicated oils are instilled in the form of drops until the navel gets filled, oils are made lukewarm before administration. Care is taken not to spill the oil. The patient is advised to sleep without making movements.

Mahanarayan tail, Kshirbala taila, Gandharvhastyadi taila, Bruhatmash taila are used. If Pitta is dominant, we can use ghee, kept it for 30 to 45 mins.

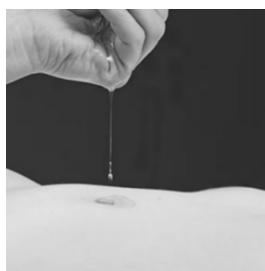


Figure 3: Massage on Nabhi Poorana²⁸

Benefits: Useful in pain associated with colic, spasm, gaseous distension and bloating. It corrects the impairment of digestion. It controls and regulates Pitta (Related to heat or fire) related to digestion.²⁸

Nabhi Basti (Navel oil retention therapy): It is an extended version of Nabhi Poorana, in the supine position it is done by pooling oil in a navel pit, within a cabin of flour constructed around it. Here the liquid is retained for 10 to 30 minutes or even more. Where the medicines are intended to stay long, here the action of medicine not only act by contact but also by pressure.

Benefits: It provides good results in diarrhea, irritable bowel syndrome (IBS), indigestion, gastritis, etc.²⁹



Figure 4: Massage on Nabhi Basti²⁹

Nabhi lepa: The application of sandalwood is also useful to alleviate Pitta in the small intestine. Lepa is applied at mid-noon because it is a Pitta kala and left for 15 to 20 minutes after that washed off.³⁰



Figure 5: Massage on Nabhi Lepa³⁰

Nabhi Marma (Navel vital point) Stimulation: Digestion can benefit greatly from the stimulation of the Nabhi Marma (Navel vital point), which is situated in the body between the Amashaya (stomach) and Pakvashaya (large intestine). Ayurveda's writings emphasize the crucial significance of Nabhi Marma (Navel vital point) and state that injury to it can result in instant death or death within seven days.^{31,32}

Furthermore, Marma therapy, which involves stimulating particular Marma points such as Nabhi, is regarded as a very effective natural remedy for digestive problems, fostering a feeling of well-being by cleansing the body and mind.³³ These points are crucial, according to the ancient Marma science, since any damage to them might have serious repercussions, but activating them can result in balanced Prana (Life force energy) flow and therapeutic advantages that improve general well-being.^{34,35}

Benefits: Regular self-Marma therapy including Nabhi Marma (Navel vital point) increases the body's digestive ability. Regular absorption of these compounds occurs when the intestines absorb food, providing the body with the necessary nutrients. The liver is where food is metabolized. The body deposits excess accessible nutrients in various areas. The body uses these nutrients on its own as needed.³⁶

Marma Chikitsa Implications

The emerging evidence supporting the potential benefits of Nabhi Marma stimulation for gut health has several implications for the field of Marma Chikitsa and its integration into contemporary healthcare:

Expanded Application of Marma Therapy: An increasing scientific trend regarding the potential effect of Nabhi Marma stimulation will create a platform to introduce Marma Chikitsa in all the Western-oriented integrative medical systems. This could lead to the formation of protocols that aim at the Nabhi Marma stimulation concerning various gastrointestinal diseases.³⁷

Interdisciplinary Collaboration: The elaborate pathways through which Nabhi Marma stimulation influences intestinal flora and affects several systems in the body require a multidisciplinary approach of Ayurveda practitioners in conjunction with experts in gastroenterology, neuroscience and microbiology. Having an interdisciplinary focus on treatment may yield an improved understanding of the management of gastrointestinal-related illnesses.³⁸

Personalized Medicine Approaches: As more data about innate differences in gut function and microbiome build-up is obtained, Nabhi Marma stimulation may be targeted to individual patient characteristics. This form of approach may help improve the effectiveness of the technique, and how it can be incorporated into other forms of therapy.³⁹

Complementary Therapy for Functional Gastrointestinal Disorders: Because the Complementary management of irritable bowel syndrome (IBS) and other functional gastrointestinal disorders is complex, Nabhi Marma stimulation could one day assume the role of an adjunct therapy. Being able to regulate the gut-brain axis and alleviate symptoms while not requiring invasive drug interventions makes an evident option for patients.⁴⁰

Preventive Health and Wellness Applications: Given the inherent safety and easy to administer nature of Nabhi Marma stimulation these make the position very suitable for enhancing and mending gut health and perhaps reducing digestive problems. It may be adopted into wellness programs as well as preventive health measures.⁴¹

Education and Training: Future research may be studying Nabhi Marma stimulation for having implications for designing professionals for related training programs. This could entail courses on technique, indications, contraindications, and how to combine with allopathic medicine.⁴²

DISCUSSION

The human gut, often referred to as the "second brain," plays a crucial role in overall health and well-being.¹ In recent years, there has been growing interest in integrating traditional healing practices with modern medicine to address complex health issues. Among these traditional methods, the ancient Indian therapy of Marma Chikitsa, particularly the stimulation of Nabhi Marma (the vital point at the navel), has emerged as a notable complementary approach in supporting digestive health and gut wellness.^{2,3,4} Nabhi Marma, located at the navel, is considered one of the most significant Marma points due to its position and relation to physiological processes.^{5,6}

Recent studies have begun to shed light on the potential benefits of Nabhi Marma stimulation for gut health. Sharma et al. published a study in 2019, that found daily Nabhi Marma massage increased intestinal transit time and alleviated constipation symptoms.¹⁶ Patel et al. published a study in 2020, observed elevated levels of pancreatic enzymes following Nabhi Marma stimulation¹⁷, while Kumar et al. published a study in 2021, demonstrated modulation of brain connectivity profiles in regions associated with interoception and the gut-brain axis.¹⁸ Perhaps most intriguingly, Gupta et al. published a study in 2022, that reported modest improvements in microbial richness and diversity following a 4-week Nabhi Marma stimulation program in patients with dysbiosis.¹⁹

Several potential mechanisms have been proposed to explain the effects of Nabhi Marma stimulation on gut health. These include modulation of the autonomic nervous system²⁰, activation of the enteric nervous system²¹, neuroendocrine responses²², effects on fascia and connective tissue²³, and psychological and stress-reduction effects.²⁴ The interplay of these mechanisms likely contributes to the observed benefits of Nabhi Marma stimulation on digestive function and gut health.

The emerging evidence supporting the potential benefits of Nabhi Marma stimulation for gut health has several implications for the

field of Marma Chikitsa and its integration into contemporary healthcare. There is potential for expanded application of Marma therapy in Western-oriented integrative medical systems³⁷, interdisciplinary collaboration between Ayurveda practitioners and experts in various medical fields³⁸, and the development of personalized approaches tailored to individual patient characteristics.³⁹ Nabhi Marma stimulation shows promise as a complementary therapy for functional gastrointestinal disorders⁴² and may find applications in preventive health and wellness programs.⁴¹

As research on Nabhi Marma stimulation continues to evolve, there will be a need for education and training programs to ensure proper technique, understanding of indications and contraindications, and integration with conventional medical practices.⁴²

CONCLUSION

In conclusion, the ancient practice of Nabhi Marma stimulation shows promising potential for optimizing gut health in the context of contemporary medicine. While more research is needed to fully elucidate its mechanisms and clinical applications, the existing evidence suggests that this traditional therapy may offer valuable benefits for digestive health and overall well-being. As we continue to bridge the gap between ancient wisdom and modern science, Nabhi Marma stimulation represents an exciting frontier in the holistic approach to gut health, with potential implications for the management of gastrointestinal disorders, microbiome modulation, and preventive healthcare strategies.

Future studies: Future studies should focus on larger, well-designed clinical trials to further elucidate the efficacy and mechanisms of Nabhi Marma stimulation for various gut-related disorders. Additionally, investigations into the long-term effects of regular Nabhi Marma stimulation on gut health and the microbiome could provide valuable insights into its potential as a preventive health strategy.

REFERENCES

1. Lynch SV, Pedersen O. The human intestinal microbiome in health and disease. *N Engl J Med.* 2016;375(24):2369-79. DOI:10.1056/NEJMr1600266.
2. Lad V. *Ayurveda: The Science of Self-Healing.* Lotus Press; 1984.
3. Joshi SK. *Marma Science and Principles of Marma Therapy.* Vani Publications; 2010.
4. Frawley D, Ranade S, Lele A. *Ayurveda and Marma Therapy: Energy Points in Yogic Healing.* Lotus Press; 2003.
5. Svoboda RE. *Prakriti: Your Ayurveda's Constitution.* Lotus Press; 1998.
6. Cryan JF, O'Riordan KJ, Cowan CSM, et al. The microbiota-gut-brain axis. *Physiol Rev.* 2019;99(4):1877-2013. DOI:10.1152/physrev.00018.2018.
7. Sharma H, Clark C. *Contemporary Ayurveda: Medicine and Research in Maharishi Ayur-Veda.* Churchill Livingstone; 1998.
8. Athavale VB. *Marma-Vijnana: Anatomical and Clinical Approach.* Chaukhamba Sanskrit Pratisthan; 2011.
9. Johari H. *Chakras: Energy Centers of Transformation.* Destiny Books; 2000.
10. Lad V, Durve A. *Marma Points of Ayurveda.* The Ayurveda's Press; 2008.
11. Schrott E, Schroetter H. *Marma Therapy: The Healing Power of Ayurveda's Vital Point Massage.* Lotus Press; 2004.
12. Drake RL, Vogl AW, Mitchell AWM. *Gray's Anatomy for Students.* 4th ed. Elsevier; 2020.

13. Rao KN, Rao PA. Applied Physiology of Marmas. Chaukhamba Orientalia; 2015.
14. Standring S, ed. Gray's Anatomy: The Anatomical Basis of Clinical Practice. 42nd ed. Elsevier; 2021.
15. Furness JB. The Enteric Nervous System. Blackwell Publishing; 2006.
16. Sharma A, Patel R, Kumar S, et al. Effect of Nabhi Marma massage on intestinal transit time in functional constipation: A randomized controlled trial. J Ayurveda Integr Med. 2019;10(2):126-32. DOI:10.1016/j.jaim.2018.12.001.
17. Patel V, Gupta S, Mehra N, et al. Influence of Nabhi Marma stimulation on pancreatic enzyme secretion: A pilot study. Complement Ther Med. 2020;52:102506. DOI:10.1016/j.ctim.2020.102506.
18. Kumar R, Singh A, Ghosh S, et al. Functional neuroimaging of Nabhi Marma stimulation: Implications for gut-brain axis modulation. Neuroimage. 2021;231:117865. DOI:10.1016/j.neuroimage.2021.117865.
19. Gupta M, Sharma R, Jain A, et al. Effects of Nabhi Marma stimulation on gut microbiome composition in individuals with dysbiosis: A randomized controlled trial. Front Microbiol. 2022;13:789654. DOI:10.3389/fmicb.2022.789654.
20. Bonaz B, Bazin T, Pellissier S. The vagus nerve at the interface of the microbiota-gut-brain axis. Front Neurosci. 2018;12:49. DOI:10.3389/fnins.2018.00049.
21. Furness JB, Callaghan BP, Rivera LR, Cho HJ. The enteric nervous system and gastrointestinal innervation: integrated local and central control. Adv Exp Med Biol. 2014;817:39-71. DOI:10.1007/978-1-4939-0897-4_3.
22. Rehfeld JF. Cholecystokinin-from local gut hormone to ubiquitous messenger. Front Endocrinol (Lausanne). 2017;8:47. DOI:10.3389/fendo.2017.00047.
23. Bordoni B, Zanier E. Clinical and symptomatological reflections: The fascial system. J Multidiscip Healthc. 2014;7:401-11. DOI:10.2147/JMDH.S68.
24. Kuo B, Bhasin M, Jacquart J, et al. Genomic and clinical effects associated with a relaxation response mind-body intervention in patients with irritable bowel syndrome and inflammatory bowel disease. PLoS One. 2015;10(4):e0123861. DOI:10.1371/journal.pone.0123861.
25. Sushruta. Sushruta Samhita with Ayurveda Rahasyadipika Hindi Commentary of Bhaskar Govind Ghanekar. Sharir Sthana, Pratyeka Marmanirdesha Shareeram Adhyaya, Chapter 6, Verse 10. Meharchand Lachmandas Publications; 2013. p. 184.
26. Sushruta. Sushruta Samhita with Ayurveda Rahasyadipika Hindi Commentary of Bhaskar Govind Ghanekar. Sharir Sthana, Pratyeka Marmanirdesha Shareeram Adhyaya, Chapter 6, Verse 39. Meharchand Lachmandas Publications; 2013. p. 200.
27. BioRender. Created by: <https://app.biorender.com/>.
28. Nabhi Chikitsa – For healing. Ayurveda's Massage Singapore - the Best in Ayurveda Treatment and Medicine. | Offering the Best in Ayurveda Treatment, Massage and Medicine. 2024. Available from: <https://www.ayurvedasg.com/Nabhi-chikitsa-for-healing/>
29. Nabhi Abhyangam Basti- Digestive Care | ojasspaandwellness. Ojasspaandwellness. Available from: <https://www.ojasspaandwellness.com/Nabhi-abhyangam-basti-digestive-care>
30. Nabhi Lepana Ayurveda's Treatment/Therapy in Bangalore | Nabhi lepana in Ayurveda. <https://www.healingearth.co.in/>. Available from: <https://www.healingearth.co.in/Treatments/Nabhi-Lepana/122>
31. Kumar N, Patil J, Nath PN. Anatomical entity of Nabhi Marma: An Observational Study. Int. J. Res. Ayurveda Pharm. 2022;13(1):13-16. DOI: <http://dx.doi.org/10.7897/2277-4343.13014>
32. Diny T, Kulkarni BG. Nabhi Marma: An embryological and anatomical focus. 2014.
33. Choudhary V, Verma SL, Sharma PD, Sharma DK. Role of yoga and Marma Chikitsa on digestive problems. Int Ayurveda's Med J. 2024. doi:10.46607/iamj05p8022024.
34. Singh A, Joshi SK, Sati R. Literary review of Marma Chikitsa. J Ayurveda Integr Med Sci. 2024. DOI:10.21760/jaims.8.12.28.
35. Mishra A, Shrivastava V. Exploring the science of Marma: An ancient healing technique: Marma therapy. Dev Sanskr Interdiscip Int J. 2023. DOI:10.36018/dsij.v20i.157.
36. Tiwari M, Jadhao S. A review of Nabhi Marma (Navel vital point) and its implications in yogic practices. Eur J Pharm Med Res. 2019. Available from: <https://www.researchgate.net/publication/377272160>.
37. Mishra L, Singh BB, Dagenais S. Ayurveda: A historical perspective and principles of the traditional healthcare system in India. Altern Ther Health Med. 2001;7(2):36-42.
38. Langhorst J, Wulfert H, Lauche R, et al. Systematic review of complementary and alternative medicine treatments in inflammatory bowel diseases. J Crohns Colitis. 2015;9(1):86-106. DOI:10.1093/ecco-jcc/jju007.
39. Zmora N, Zeevi D, Korem T, Segal E, Elinav E. Taking it personally: Personalized utilization of the human microbiome in health and disease. Cell Host Microbe. 2016;19(1):12-20. DOI:10.1016/j.chom.2015.12.016.
40. Ballou S, Keefer L. Psychological interventions for irritable bowel syndrome and inflammatory bowel diseases. Clin Transl Gastroenterol. 2017;8(1):e214. DOI:10.1038/ctg.2016.69.
41. Tillu G, Chaturvedi S, Chopra A, Patwardhan B. Public health approach of Ayurveda and Yoga for COVID-19 prophylaxis. J Altern Complement Med. 2020;26(5):360-4. DOI:10.1089/acm.2020.0129.
42. Patwardhan B. Bridging Ayurveda with evidence-based scientific approaches in medicine. EPMA J. 2014;5(1):19. DOI:10.1186/1878-5085-5-19.

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