AYUSHDHARA
ISSN: 2393-9583 (P)/ 2393-9591 (O)
An International Journal of Research in AYUSH and Allied Systems

Review Article

INTEGRATED CONCEPT OF *SAMANYA-VISHESHA* SIDDHANTA AND PHYSIOLOGY: A REVIEW OF HOMEOSTASIS AND REGULATORY MECHANISMS

Ashutosh Gaur[1]*, Tamanna Lochab[1], Alok Kumar Asthana[2], Monika Asthana[3]
*[1]PG Scholar, [2]Associate Professor, Department of Kriya Sharir, CBPACS, New Delhi
[3]Associate Professor & HOD, Department of Panchkarma, SRM Govt. Ayurvedic College, Bareilly, UP, India.

Article info
Article History:
Received: 24-02-2026
Accepted: 18-03-2026
Published: 06-05-2026
KEYWORDS:
Samanya, Vishesha, Homeostasis, Feedback Mechanisms, Regulatory Mechanism.

ABSTRACT

Samanya–Vishesha Siddhanta is a fundamental Ayurvedic principle that explains the regulation of physiological and pathological states through similarity and dissimilarity. According to this concept, similar attributes promote increase in bodily components, whereas opposing attributes lead to their reduction, thereby maintaining the balance of *Dosha, Dhatu*, and *Mala*. In modern physiology, a comparable concept is described as homeostasis, which refers to the ability of the body to maintain a stable internal environment despite continuous fluctuations. This stability is achieved through coordinated regulatory mechanisms involving the nervous and endocrine systems, primarily mediated by feedback processes that either correct deviations or amplify specific responses when required. The present review explores the integration of these classical and contemporary concepts, highlighting their similarities across different levels of biological organization, including cellular, tissue, and systemic levels. The Ayurvedic principles of increase and decrease correspond closely with anabolic and catabolic processes as well as feedback-based regulation in modern science. This integrative perspective provides a comprehensive understanding of physiological balance and emphasizes that both systems aim to maintain internal stability. Such an approach supports the development of holistic strategies for health promotion and disease management.

INTRODUCTION

Maintenance of health is the foremost objective of Ayurveda, achieved through the preservation of equilibrium among fundamental biological entities, namely *Dosha, Dhatu*, and *Mala*. This state of balance, often referred to as *Swasthya*, reflects the harmonious functioning of physiological processes and is essential for sustaining life[1]. Classical Ayurvedic texts emphasize that any deviation from this equilibrium leads to disease, thereby highlighting the importance of regulatory principles governing bodily homeostasis.

Among these principles, *Samanya–Vishesha Siddhanta* occupies a central position as a universal law explaining physiological and pathological changes. The principle states that "*Samanya* leads to *Vriddhi* (increase), while *Vishesha* leads to *Kshaya* (decrease)"[2]. In other words, substances, qualities, or actions possessing similar attributes to a particular body component promote its augmentation, whereas those with dissimilar properties bring about its reduction. This doctrine is not limited to theoretical understanding but has wide clinical applicability in dietetics, pharmacology, and therapeutic interventions. For instance, the intake of *Guru* (heavy) and *Snigdha* (unctuous) substances enhances *Kapha Dosha* due to similarity, whereas *Laghu* (light) and *Ruksha* (dry) qualities counteract it through dissimilarity.

Access this article online
Quick Response Code
https://doi.org/10.47070/ayushdhara.v13i2.2656

MATERIAL AND METHODS

The present study is a conceptual review based on classical Ayurvedic texts and modern physiology literature. Foundational concepts of *Samanya–Vishesha Siddhanta* were collected from Charaka Samhita and Sushruta Samhita. Modern concepts of homeostasis and feedback mechanisms were reviewed from standard textbooks such as Guyton and Hall Textbook

of Medical Physiology. In addition, relevant peer-reviewed research articles were analyzed to support the integrative approach. The collected data were systematically reviewed and compared to establish correlations between Ayurvedic and modern physiological concepts.

From a broader perspective, *Samanya–Vishesha Siddhanta* serves as a regulatory framework that maintains internal balance by modulating the relative proportions of bodily constituents. It governs dynamic processes such as growth, metabolism, tissue nourishment, and degeneration, thereby ensuring physiological stability. The concept can be interpreted as a qualitative model of biological regulation based on the interaction of *Guna* (properties), *Dravya* (substances), and *Karma* (actions).[3]

In contrast, modern physiology explains the maintenance of internal stability through the concept of homeostasis, defined as the ability of the body to maintain a relatively constant internal environment despite external fluctuations. This stability is achieved through complex regulatory systems involving the nervous, endocrine, and cellular mechanisms. Homeostasis operates via coordinated processes that include sensors, control centres, and effectors, which continuously monitor and adjust physiological variables such as temperature, pH, blood glucose levels, and fluid balance.

A key component of homeostatic regulation is the presence of feedback mechanisms, particularly negative feedback systems that counteract deviations from a set point, thereby restoring equilibrium. Positive feedback mechanisms, although less common, amplify physiological responses under specific conditions. These regulatory processes ensure that the internal environment remains within optimal limits necessary for cellular function and survival.

When analysed comparatively, striking parallels emerge between *Samanya–Vishesha Siddhanta* and the principles of homeostasis. The concept of *Samanya* can be correlated with processes that promote augmentation or anabolic activity, while *Vishesha* resembles corrective or inhibitory mechanisms analogous to negative feedback. Both systems, despite their distinct epistemological foundations, converge on the common goal of maintaining biological balance and functional integrity.[4]

Furthermore, these similarities extend across various levels of biological organization. At the cellular level, nutrient assimilation and waste elimination reflect principles of increase and decrease. At the tissue and organ levels, regulatory mechanisms ensure coordinated function and adaptation. Thus, Ayurveda and modern physiology, though differing in language and methodology, describe fundamentally similar processes governing life.

In the current era of integrative medicine, there is a growing need to bridge traditional knowledge systems with contemporary scientific understanding. Exploring the relationship between *Samanya–Vishesha Siddhanta* and homeostatic mechanisms not only enhances conceptual clarity but also provides a holistic framework for understanding health and disease. Such an integrative approach may contribute to the development of more comprehensive therapeutic strategies that combine the strengths of both Ayurveda and modern medicine.[5]

Literary Review

Samanya–Vishesha Siddhanta

Samanya–Vishesha Siddhanta is one of the fundamental principles of Ayurveda that explains the dynamics of increase and decrease within the body. According to this doctrine, *Samanya* (similarity) is responsible for the augmentation (*Vriddhi*) of bodily components, whereas *Vishesha* (dissimilarity) leads to their diminution *(Kshaya).* This principle operates universally and governs the regulation of physiological as well as pathological processes. It is based on the concept that substances, qualities, and actions possessing similar attributes to a particular biological entity enhance it, while those having opposing characteristics reduce it.[6]

The application of this *Siddhanta* extends across all major components of the body, including *Dosha, Dhatu,* and *Mala*, as well as their inherent properties such as *Guna* (qualities), *Karma* (functions), and *Dravya* (substances). For instance, consumption of food items possessing *Guru* (heavy) and *Snigdha* (unctuous) qualities leads to an increase in *Kapha* Dosha due to similarity in attributes, exemplifying the principle of *Samanya*. Conversely, intake of *Laghu* (light) and *Ruksha* (dry) substances counteracts *Kapha* by virtue of dissimilarity, demonstrating the action of *Vishesh*[7].

Thus, this principle provides a comprehensive framework for understanding how diet, lifestyle, and therapeutic interventions influence the internal environment. It not only explains normal physiological maintenance but also forms the basis for disease causation and management by guiding the use of opposing qualities to restore balance[8].

Homeostasis (Modern Physiology)

In modern physiology, the concept of homeostasis refers to the ability of the body to maintain a relatively stable internal environment despite continuous changes in external conditions. This stability is essential for optimal cellular function

and overall survival. Homeostasis is achieved through highly coordinated regulatory systems that continuously monitor physiological variables and make necessary adjustments to keep them within a narrow, optimal range[9].

The homeostatic mechanism typically involves four key components: a sensor, which detects changes in the internal environment; a control centre, which processes this information and determines the appropriate response; an effector, which carries out the corrective action; and a set point, which represents the desired normal value of a physiological parameter. These elements work together in a cyclic manner, forming regulatory loops that ensure internal constancy.

For example, regulation of body temperature involves thermoreceptors (sensors) that detect changes, the hypothalamus (control centre) that integrates the signals, and effectors such as sweat glands or muscles that either dissipate or generate heat. Through such mechanisms, the body maintains equilibrium in parameters like temperature, blood glucose levels, pH, and electrolyte balance[10].

Feedback Mechanisms

Feedback mechanisms constitute the functional basis of homeostatic regulation and play a crucial role in maintaining internal stability. These mechanisms operate by continuously adjusting physiological processes in response to deviations from normal values. They are broadly classified into negative feedback and positive feedback systems.

Negative feedback is the most common regulatory mechanism in the human body and functions to counteract any deviation from the set point, thereby restoring equilibrium. For instance, when body temperature rises above normal, mechanisms such as sweating and vasodilation are activated to reduce it, thus maintaining thermal balance[11]. This type of feedback ensures stability and prevents excessive fluctuations in physiological parameters.

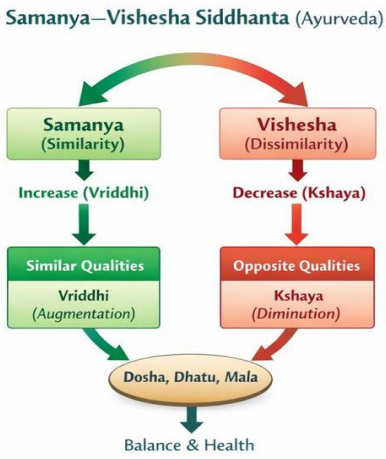
In contrast, positive feedback mechanisms amplify the initial stimulus, leading to an increased response until a specific endpoint is reached. A classic example is uterine contractions during labor, where the release of hormones intensifies contractions until childbirth occurs. Although less common, positive feedback plays an important role in specific physiological events requiring rapid and decisive outcomes[12].

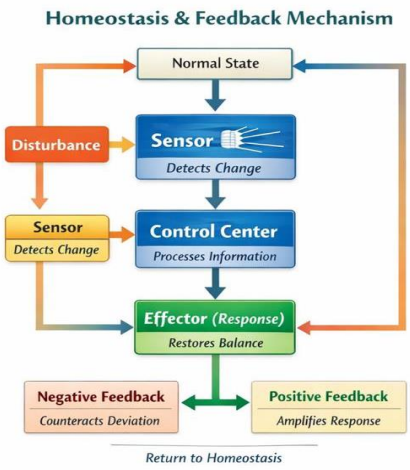
Both types of feedback mechanisms contribute to what is known as dynamic equilibrium, where the internal environment is continuously adjusted in response to internal and external changes. This concept closely resembles the Ayurvedic understanding of balance, where the interplay of opposing forces ensures the proper functioning of the body.

Ayurvedic Concept	**Modern Equivalent**	**Explanation**
Samanya (increase by similarity)	Positive feedback (anabolic process)	Promote increase in physiological process
Vishesha (decrease by dissimilarity)	Negative feedback (catabolic process)	Reduce excess to maintain balance
Dhatu Samyata	Homeostasis	State of equilibrium
Agni regulation	Metabolic regulation	Maintain internal stability
Dosha imbalance	Pathophysiology	Disease condition

Integrated Perspective

When analysed collectively, *Samanya–Vishesha Siddhanta* and modern concepts of homeostasis and feedback mechanisms reveal a shared objective of maintaining internal balance. While Ayurveda explains these processes through qualitative attributes and interactions, modern physiology describes them in terms of biochemical and regulatory pathways. Despite these differences in approach, both systems converge on the principle of dynamic regulation, emphasizing the continuous adjustment required to sustain life.





Integration with Feedback Mechanisms

The principle of *Samanya–Vishesha Siddhanta* can be meaningfully interpreted in the light of modern feedback mechanisms that regulate physiological processes. In this context, *Samanya* may be understood as a positive driving force that promotes the increase or augmentation of bodily constituents when similar factors are introduced. When the body is exposed to substances or influences possessing analogous properties, there is a tendency toward enhancement of corresponding structures or functions. This phenomenon can be correlated with anabolic processes in modern physiology, such as hormonal stimulation and nutrient-mediated growth. For example, the presence of growth-promoting hormones or an adequate supply of nutrients leads to tissue development and cellular proliferation, reflecting the concept of similarity-induced increase[13].

On the other hand, *Vishesha* can be interpreted as a regulatory or corrective mechanism that counteracts excess by introducing opposing qualities. This aspect closely resembles negative feedback systems in physiology, which function to restore equilibrium when deviations occur. When a particular parameter exceeds its normal range, physiological responses are activated to bring it back to baseline. For instance, elevated blood glucose levels stimulate insulin secretion, which facilitates glucose uptake and lowers its concentration in the blood. Similarly, an increase in body temperature triggers mechanisms such as sweating and vasodilation to dissipate heat. These responses exemplify how opposing actions help maintain internal balance. Thus, *Vishesha* may be viewed as a natural corrective force that ensures stability by neutralizing the effects of excessive similarity, thereby aligning closely with the concept of negative feedback.

Regulatory Mechanisms Across Physiological Levels

The integrative understanding of *Samanya–Vishesha Siddhanta* and feedback regulation can be extended across different levels of biological organization, from the cellular to the systemic level. At the cellular level, physiological regulation involves processes such as nutrient uptake, energy production, and waste elimination. When cells receive nutrients that are compatible with their requirements, growth and proliferation are promoted, illustrating the principle of *Samanya*. Conversely, catabolic processes break down cellular components and remove waste products, thereby preventing accumulation and maintaining balance, which reflects the action of *Vishesha*. The continuous interplay between anabolic and catabolic activities ensures cellular homeostasis[14].

At the tissue level, a dynamic balance exists between processes of synthesis and degradation. Tissue repair and regeneration depend on the availability of appropriate nutrients and growth signals, while degeneration and apoptosis help eliminate damaged or unnecessary cells. This balance between constructive and destructive processes is essential for maintaining tissue integrity and function. The augmentation of tissue elements through similarity and their reduction through opposing mechanisms can be directly correlated with the principles of *Samanya* and *Vishesha*.

At the organ and system level, regulation is achieved through complex coordination between the endocrine and nervous systems. These systems continuously monitor and adjust vital physiological parameters such as body temperature, blood glucose levels, and fluid-electrolyte balance. For example, hormonal regulation of glucose metabolism and neural control of thermoregulation operate through intricate feedback loops that maintain internal stability. These mechanisms function in a manner analogous to the

Ayurvedic concept of maintaining equilibrium through the interaction of similar and dissimilar factors.

Overall, at every level of organization, the body employs regulatory strategies that mirror the fundamental principles of *Samanya–Vishesha Siddhanta*, emphasizing the universality of this concept.

Structural and Functional Similarities

A comparative analysis of Ayurveda and modern physiology reveals notable similarities in both structural organization and functional regulation. From a structural perspective, Ayurveda conceptualizes the body in terms of *Dosha, Dhatu,* and *Mala,* which collectively represent functional regulators, structural components, and waste products, respectively. In modern physiology, the body is understood through hierarchical levels such as cells, tissues, and organs, each contributing to the overall functioning of the organism. Although the terminologies differ, both systems describe an organized framework that supports life processes[15].

Functionally, Ayurveda explains regulation through the interaction of opposing qualities, where balance is achieved by counteracting excesses with appropriate opposites. Modern physiology, in contrast, describes similar processes through feedback mechanisms, particularly negative feedback systems that maintain equilibrium by reversing deviations from normal values. Despite differences in explanatory models- qualitative in Ayurveda and quantitative in physiology- both systems emphasize continuous regulation as a means to sustain internal stability[16].

Ultimately, both perspectives converge on common goals, namely the maintenance of stability, the ability to adapt to changing conditions, and the preservation of life. This convergence highlights the relevance of integrating traditional Ayurvedic principles with modern scientific understanding to achieve a more comprehensive view of physiological regulation.

DISCUSSION

Samanya–Vishesha Siddhanta and modern physiological concepts of homeostasis share a common objective of maintaining internal equilibrium. The Ayurvedic principle explains regulation through similarity and dissimilarity, where *Samanya* promotes increase and *Vishesha* brings about reduction. This closely parallels physiological mechanisms, where anabolic processes enhance body functions and negative feedback systems correct deviations to restore balance. At different levels of organization- cellular, tissue, and systemic- both systems demonstrate similar regulatory patterns. Cellular metabolism reflects a balance between synthesis and breakdown, tissues maintain integrity through repair and degeneration, and organ systems regulate vital parameters through neural and endocrine coordination. These processes correspond to the Ayurvedic view of maintaining equilibrium through opposing influences.

Although Ayurveda presents a qualitative and holistic model based on *Guna, Dravya*, and *Karma*, and modern physiology explains regulation through quantitative and mechanistic pathways, both recognize imbalance as the root of disease and equilibrium as the basis of health. Therefore, integrating these perspectives provides a more comprehensive understanding of physiological regulation and supports the development of holistic therapeutic approaches.

CONCLUSION

Samanya–Vishesha Siddhanta represents a fundamental Ayurvedic concept that explains the maintenance of physiological balance through the principles of similarity and dissimilarity. When examined alongside modern physiological concepts such as homeostasis and feedback mechanisms, a clear conceptual similarity emerges. Both systems emphasize the importance of maintaining a stable internal environment for proper functioning of the body. While Ayurveda describes this regulation in terms of qualitative factors like *Guna, Dravya, and Karma*, modern physiology explains it through complex biochemical, neural, and endocrine mechanisms that operate via feedback loops. The principle of *Samanya* can be correlated with processes that promote growth and augmentation, similar to anabolic activities in the body, whereas *Vishesha* reflects mechanisms that counteract excess and restore normalcy, comparable to negative feedback systems. These regulatory processes are evident at all levels of biological organization, from cellular metabolism to systemic control of vital functions such as temperature, blood glucose, and fluid balance. This demonstrates that both traditional and modern perspectives recognize the dynamic nature of physiological equilibrium.

Although the explanatory models differ in their approach, both Ayurveda and modern physiology ultimately converge on the understanding that health is a state of balance and disease arises from its disturbance. Therefore, integrating *Samanya–Vishesha Siddhanta* with contemporary concepts of homeostasis provides a more comprehensive and holistic framework for understanding human physiology. Such an integrative approach not only enhances theoretical insight but also supports the development of effective

strategies for disease prevention, health promotion, and therapeutic intervention.

REFERENCES

1. Acharya JT. Sushruta Samhita of Sushruta, Sutra Sthana. Varanasi: Chaukhambha Sanskrit Sansthan; 2014.
2. Acharya JT. Charaka Samhita of Agnivesha, Sutra Sthana. Varanasi: Chaukhambha Sanskrit Sansthan; 2015.
3. Vishwakarma MK. Samanya Vishesh Siddhant: A Fundamental Principle of Ayurveda. J Ayurveda Integr Med Sci. 2025; 10(6): 40–45.
4. Hall JE. Guyton and Hall Textbook of Medical Physiology. 14th ed. Philadelphia: Elsevier; 2021.
5. Meghwal S, Bhatnagar S. Understanding Charaka Samhita in light of Samanya-Vishesha Siddhanta. J Indian Syst Med. 2022; 10(2): 104–110.
6. Vagbhata. Ashtanga Hridaya, Sutra Sthana. Varanasi: Chaukhambha Orientalia; 2016.
7. Pandey DN, Prakash NP. Universal significance of the principle of Samanya and Vishesha beyond Ayurveda. J Ayurveda Integr Med. 2018; 9(4): 308–311.
8. Chacko N. A comprehensive view on the applicability of Samanya–Vishesha Siddhanta. J Ayurveda Integr Med Sci. 2024; 9(12)
9. Guyton AC. Homeostasis and control systems. In: Textbook of Medical Physiology. Elsevier; 2021.
10. Barrett KE, Barman SM, Brooks HL, Yuan JXJ. Ganong's Review of Medical Physiology. 26th ed. New York: McGraw Hill; 2019.
11. Ganong WF. Regulation of internal environment. In: Review of Medical Physiology. McGraw Hill; 2019.
12. Hall JE. Guyton and Hall Textbook of Medical Physiology. 14th ed. Philadelphia: Elsevier; 2021
13. Borase PS, Bhojraj K, Aswar S. Concept of Samanya-Vishesha Siddhanta: A classical review. J Pharmacogn Phytochem. 2026; 15(1): 339–341.
14. Chavda K, Prajapat M, Sharma AK, et al. Concept of Samanya Vishesha Siddhanta and its utility in Ayurveda: A review. Int Res J Ayurveda Yoga. 2023; 6(2): 31-36.
15. Acharya JT. Sushruta Samhita of Sushruta, Sutra Sthana. Varanasi: Chaukhambha Sanskrit Sansthan; 2014.
16. Hall JE. Guyton and Hall Textbook of Medical Physiology. 14th ed. Philadelphia: Elsevier; 2021.

Cite this article as:
Ashutosh Gaur, Tamanna Lochab, Alok Kumar Asthana, Monika Asthana. Integrated Concept of Samanya-Vishesha Siddhanta and Physiology: A Review of Homeostasis and Regulatory Mechanisms. AYUSHDHARA, 2026;13(2):449-454.
https://doi.org/10.47070/ayushdhara.v13i2.2656
Source of support: Nil, Conflict of interest: None Declared

***Address for correspondence**
Dr. Ashutosh Gaur
PG Scholar,
Department of Kriya Sharir,
CBPACS, New Delhi.
Email: ashutoshgaur010@gmail.com