

AYURVEDIC CONCEPT OF IMMUNITY: REVIEW ARTICLE ON OJAS, BALA AND VYADHIKSHAMATVA

¹*Dr. Kanika Sharma, ²Prof. Akhilesh Kumar Srivastava, ³Dr. Swapnil Saini,
⁴Dr. Pooja Sharma, ⁵Dr. Ajay Kumar

¹MD. 2nd Year, Deptt. of Rog Nidan Evam Vikriti Vigyan, R.G.G.P.G. Ayurvedic College and Hospital, Paprola, Distt. Kangra, H.P., India.

²Prof. and HOD, Deptt. of Rog Nidan Evam Vikriti Vigyan, R.G.G.P.G. Ayurvedic College and Hospital, Paprola, Distt. Kangra, H.P., India.

³Reader, Deptt. of Rog Nidan Evam Vikriti Vigyan, R.G.G.P.G. Ayurvedic College and Hospital, Paprola, Distt. Kangra, H.P., India.

^{4,5}Lecturer, Deptt. of Rog Nidan Evam Vikriti Vigyan, R.G.G.P.G. Ayurvedic College and Hospital, Paprola, Distt. Kangra, H.P., India.

Article Received on 25 April 2026,

Article Revised on 15 May 2026,

Article Published on 01 June 2026,

<https://doi.org/10.5281/zenodo.20438446>,

*Corresponding Author

Dr. Kanika Sharma

MD. 2nd Year, Deptt. of Rog Nidan Evam Vikriti Vigyan, R.G.G.P.G. Ayurvedic College and Hospital, Paprola, Distt. Kangra, H.P., India.



How to cite this Article: ¹*Dr. Kanika Sharma, ²Prof. Akhilesh Kumar Srivastava, ³Dr. Swapnil Saini, ⁴Dr. Pooja Sharma, ⁵Dr. Ajay Kumar. (2026). Ayurvedic Concept of Immunity: Review Article on Ojas, Bala And Vyadhikshamatva. World Journal of Pharmaceutical Research, 15(11), 121-131. This work is licensed under Creative Commons Attribution 4.0 International license.

ABSTRACT

Immunity is the body's natural defense mechanism responsible for protection against diseases and maintenance of physiological balance. *Ayurveda* explains immunity through the concepts of *Ojas*, *Bala*, and *Vyadhikshamatva*. Among these, *Ojas* is regarded as the vital essence of all *Dhatus* and the basis of vitality, strength, and resistance to disease. Proper functioning of *Agni*, balanced *Dhatus*, wholesome diet, and healthy *Srotasas* are considered essential for the formation and preservation of *Ojas*. The present study aims to critically analyze the *Ayurvedic* concept of immunity with special reference to *Ojas* and correlate it with modern immunological perspectives.

KEYWORDS: *Ojas*, *Bala*, *Vyadhikshamatva*, Immunity.

INTRODUCTION

Immunity can be understood as the inherent capability of the

body to protect itself against diseases by inhibiting the invasion and multiplication of pathogens and by neutralizing their toxic effects. In modern science, it represents a highly coordinated defense system involving cellular and humoral mechanisms.

Ayurveda presents a broader and more integrative concept of health. An individual is considered *Swastha* when there is equilibrium of *Dosha*, *Agni*, *Dhatu*, and *Mala*, along with a balanced state of *Atma*, *Indriya*, and *Manas*. Within this holistic framework, concepts such as *Vyadhikshamatva*, *Bala*, and *Ojas* closely parallel the modern understanding of immunity.

Vyadhikshamatva refers to the body's ability to resist and prevent disease. *Bala* denotes physical and mental strength, while *Ojas* is considered the supreme essence of all *Dhatu*s.

Although previous studies have compared *Ayurveda* with modern immunology, the present study aims to critically review the *Ayurvedic* concept of immunity and its correlation with contemporary immunological concepts.

MATERIALS

- 1. *Ayurvedic Sources:*** *Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya*, and other relevant classical texts.
- 2. *Modern Sources:*** Standard immunology textbooks, peer-reviewed journals, and databases such as PubMed and Google Scholar.

Methods

- 1. *Literature Review:*** Classical *Ayurvedic* texts and modern scientific literature were systematically reviewed to gather information on *Ojas* and immunity.
- 2. *Data Analysis:*** Relevant data were extracted, compiled, and comparatively analyzed for the data.

Concept of *Ojas* in *Ayurveda*

In the Sanskrit dictionary *Shabda Kalpadruma*, the term *Ojas* is described using synonyms such as *Bala* (strength) and *Aarjavam* (vital integrity or straightforwardness).

तत्र रसादीनां शुक्रांतानां धातूनां यत परं तेजस्तत खल्वोजस्त्वेव बलमित्युच्यते (सु.सू. 15/19)

Ojas is considered the refined essence of all seven *Dhatu*s, representing a highly subtle and fundamental principle in *Ayurveda*. It is the ultimate expression of the vitality of these tissues and plays a crucial role in maintaining strength, vigor, and immunity. *Ojas* serves as the key

factor determining *Bala* (physical strength) and *Vyadhikshamatva* (the body's ability to resist diseases).

According to *Chakrapanidatta*, *Ojas* is the refined essence of all *Dhatu*s and is inseparable from them, like ghee in milk or honey in flowers. It resides in the heart, circulates with *Rasa* through blood vessels, and nourishes the whole body.

Formation of *Ojas*

It is believed to begin at the very moment of fertilization, when *Shukra* unites with *Shonita*. During this process, *Paka* of *Shukra Dhatu*, occur results in production of two components: *Sara* (the essential nutritive part) and *Mala* (waste products).

As development progresses, *Ojas* is further nourished and increased up to *Ardhanjali* quantity through *Aahararasa* obtained from the mother. This maternal nutrition possesses properties similar to *Ojas* and supports the continuous growth of the embryo.

In the later stages of intrauterine life, when the heart develops, *Ojas* becomes established in the heart and circulates throughout the fetal body via the connected vessels. It nourishes every tissue and maintains structural and functional integrity.

Synthesis of *Ojas* in adult life

The process of *Ojas* formation is not fully clarified. It simply describe as the *Sara* of all *Dhatu*s in the text. This definition does not clearly indicate whether *Ojas* is produced separately by each *Dhatu* as its own essence and then collectively termed *Sarvadhatusara*, or whether it is formed through a combined sequence of metabolic transformations involving all *Dhatu*s. Classical commentators suggest that both mechanisms are involved.

Each *Dhatu* synthesizes its own *Ojas* during the process of its formation (*Dhatvagni Vyapara*). The *Ojas* produced at this stage, known as *Poshaka Ojas*, serves to nourish the already existing and stable *Ojas* (*Poshya Ojas*) present within the respective *Sthayi Dhatu*. In addition to this localized nourishment, a portion of the *Dhatu*-specific essence, due to its similar properties and affinity, may enter the general circulation and contribute collectively to the formation of *Sarvadhatusara*.

For example, the *Sara* derived from *Rasa Dhatu* nourishes the existing *Ojas* within *Sthayi Rasa Dhatu* through its specific *Srotasas*, as both share similar properties. In a similar way,

all *Dhatus* produce their own *Ojas* from their respective nutrients during their metabolic processes.

Among all *Dhatus*, *Shukra Dhatu* is given special importance because it contains the combined essence of all *Dhatus*. After fertilization, it plays a crucial role in the development of all *Dhatus* in the embryo, as it carries within it the combined nutritive potential of the entire *Dhatu* system.

Nourishment of *Ojas*

Ojas is continuously utilized in the body during the performance of its vital functions; therefore, it must be constantly replenished to maintain its normal quantity and sustain life. *Acharya Sushruta* describes food (*Aahara*) as the fundamental basis of life, as well as the source of *Bala* (strength), *Varna* (complexion), and *Ojas*.

Thus *Ojas* is maintained through wholesome *Ojas*-promoting *Aahara*, proper *Agni*, and healthy *Srotasas*. Adequate digestion and metabolism ensure proper nourishment of *Dhatus* and continuous replenishment of *Ojas*.

Types of *Ojas*

According to *Acharya Chakrapanidatta*, *Ojas* is classified into two types:

1. ***Para Ojas*** – Located in the *Hridaya*, present in a quantity of eight drops. Even a slight loss of this type is considered life-threatening.
2. ***Apara Ojas*** – Measured as *Ardhanjali Pramana*, its depletion is comparatively less harmful than that of *Para Ojas*.

Sthan* of *Ojas

Ojas primarily reside in the *Hridaya*. From there, it combines with *Rasa* and circulates throughout the body via *Dhamanis*. The heart plays a central role in distributing *Sleshmika Ojas* to all body tissues. The transport of *Ojas* occurs through the *Dasha Mahamula Dhamanis*, the ten major vessels responsible for carrying it throughout the body. These channels facilitate processes such as filtration, diffusion, and permeation, thereby ensuring continuous nourishment and proper supply of *Ojas* to all tissues.

Properties of *Ojas*

- **Colour:** According to *Acharya Sushruta*, *Ojas* is *Shukla Varna* in colour. Other *Acharyas* describe it as a clear substance with slight reddish and yellowish tinges.

- **Odour:** *Ojas* is said to possess *Lajagandhi* smell, meaning an aroma similar to *Laja* (parched rice).
- **Taste:** *Acharya Charaka* describes it as similar to honey, predominantly *Madhura Rasa* with a slight *Kashaya* taste.
- **Pharmacotherapeutic Properties:** Classical texts describe 20 *Sharira Gunas*. *Ojas* has those qualities that promote anabolic and anti-catabolic activities in the body, thereby contributing to its various therapeutic and protective functions.

Functions of *Ojas*

Ojas plays a crucial role throughout all three stages of life—*Utpatti*, *Sthiti* (maintenance), and *Pralaya* (termination of life).

In *Utpatti*

a. In Fertilization

Ojas is believed to be present in both *Shukra* and *Shonita* in the form of their essential *Sara*. Fertilization cannot occur in the absence of this vital essence.

b. In Viability of the Fetus

In 8th month of pregnancy, *Ojas* is said to circulate between the mother and fetus via placenta. If delivery occurs at this stage and at that time *Ojas* is predominantly in the maternal body, then newborn may not survive due to its deficiency.

In *Sthiti Avastha*

a. In Maintenance of Health

Although *Dosha*, *Dhatu*, and *Mala* are the fundamental components of the body, even balanced *Doshas* cannot sustain life in the absence of *Ojas*. It supports all bodily, verbal, mental, sensory, and higher functions, thereby maintaining harmony and homeostasis in the body.

b. As a Protective Factor

Acharya Sushruta considers *Bala* as a synonym of *Ojas* because of their close relationship thus provides strength, resistance, and protection to the body from diseases.

Vitiation of Ojas

Condition	Description
<i>Ojovisramsas</i>	<i>Dalhana</i> and <i>Chakrapanidatta</i> describe <i>Visramsas</i> as the leakage of <i>Ojas</i> from the <i>Dhatuvaha Srotasas</i> or improper distribution of <i>Ojas</i> to the body tissues (<i>Dhatus</i>).
<i>Ojovyapad</i>	According to <i>Chakrapanidatta</i> , it occurs when the natural qualities of <i>Ojas</i> are diminished due to vitiated <i>Doshas</i> . <i>Dalhana</i> explains it as the deviation of <i>Ojas</i> from its normal state due to aggravated <i>Doshas</i> and <i>Dushyas</i> .
<i>Ojakshaya</i>	<i>Ojakshaya</i> refers to depletion of <i>Ojas</i> caused by factors such as <i>Abhighata</i> , <i>Kshaya</i> , <i>Krodha</i> , grief (<i>Shoka</i>), anxiety (<i>Dainya</i>), excessive exertion (<i>Shrama</i>), and hunger (<i>Kshudha</i>). <i>Dalhana</i> also states that the normal function of <i>Bala</i> becomes impaired in this condition.

Condition	Symptoms	Explanation
<i>Oja Visransa</i>	<i>Sandhi Slesana</i>	Looseness or laxity of joints
	<i>Gatrasada</i>	Generalized weakness, fatigue
	<i>Dosa Chyavana</i>	Derangement of <i>Doshas</i> from their normal physiological sites
	<i>Kriya Sannirodha</i>	Impairment or obstruction of normal physical and mental activities
<i>Oja Vyapada</i>	<i>Stabdha Guru</i> <i>Gatrata</i>	Stiffness, heaviness, and inertness of the body and extremities
	<i>Vata Sopha</i>	Generalized swelling associated with aggravated <i>Vata</i>
	<i>Varnabheda</i>	Alteration in normal complexion
	<i>Glani</i>	Fatigue, debility
	<i>Tandra</i> <i>Nidra</i>	Drowsiness, lethargy Excessive sleep
<i>Ojakshaya</i>	<i>Mamsaksaya</i>	Wasting or depletion of muscle tissue
	<i>Moha</i>	Confusion or impaired consciousness
	<i>Murccha</i>	Fainting or loss of consciousness
	<i>Pralapa</i>	Delirium or irrelevant speech
	<i>Marana</i>	Death in severe cases

Concept of Vyadhikshamatva

वयाधिक्षमत्वं व्याधिबलविरोधित्वं व्याध्युत्पादप्रतिबन्धकत्वम् इति यावत् ॥

(च. सू. २८/१६ पर चक्रपाणि)

In *Ayurveda*, the concept of immunity is described as *Vyadhikshamatva*, which signifies the body's ability to resist disease and maintain health. This concept integrates both preventive and curative dimensions of healthcare. *Acharya Chakrapani* has elaborated *Vyadhikshamatva* through two important aspects: *Vyadhibalavirodhitvam* (the capacity to oppose the strength of disease) and *Vyadhyutpadapratibandhakatvam* (the ability to prevent the occurrence of disease). These two dimensions clearly indicate that immunity in *Ayurveda* is not only defensive but also protective in nature.

When *Nidana* interact with the body, they initiate pathological processes; however, the body simultaneously activates its defense mechanisms to counteract these changes. This dynamic resistance offered by the body against disease causation and progression is termed as immunity.

The strength of *Vyadhikshamatva* depends on equilibrium of *Doshas*, proper nourishment and balance of *Dhatu*s, normal functioning of *Agni* and the patency of *Srotas*. These factors collectively maintain internal homeostasis and enhance the body's resistance.

It is also observed that not all individuals respond equally to disease-causing factors. Even the use of *Ahitakara Aahara* may not produce disease immediately in some individuals, indicating variability in individual resistance. This highlights the individualized nature of immunity described in *Ayurveda*.

Concept of *Ojas* and *Kapha*

“प्राकृतस्तु बलं श्लेष्मा विकृतो मल उच्यते ।

स चैवौजः स्मृतः काये स च पाप्मोपदिश्यते ॥”

(C. Su. 17/117)

Kapha is one of the three *Tridosha* responsible for maintaining body equilibrium. It possesses properties such as *Snigdha*, *Sita*, *Guru*, *Manda*, *Slakshna*, *Mrtsna*, and *Sthira*.

In its normal state, *Sleshma* is considered as *Bala* and *Ojas*, while in an abnormal state it becomes *Mala* and *Papma* (disease-causing). In its physiological state, *Kapha* shares functional similarity with *Ojas* in maintaining structural stability and bodily resistance.

Concept of *Ojas* and *Bala*

Bala denotes the functional strength and capacity of the body and mind. Classical texts closely associate *Bala* with the normal state of *Kapha* and the presence of adequate *Ojas*.

Types of *Bala*

Bala in *Ayurveda* is classified into three types: *Sahaja*, *Kalaja*, and *Yuktikritaja*.

Sahaja Bala

Sahaja Bala or *Prakruta Bala* denotes the natural form of immunity that is present from birth and is genetically determined. It encompasses both the physical (*Sharira*) and psychological (*Satva*) dimensions of an individual. Its quality is influenced by the quality of *Shukra* (sperm) and *Artava* (ovum), along with appropriate timing and environmental factors at the time of

conception. In the neonatal period, breast milk plays a crucial protective role by safeguarding the infant against gastrointestinal infections. This protection is attributed to the presence of preformed antibodies in maternal milk, which exemplify natural passive immunity.

Kalaja Bala

This type of strength varies with age and seasons. *Bala* is relatively lower during *Adana Kala* (late winter, spring, and summer) and higher during *Visarga Kala* (rainy, autumn, winter). Age-wise, it is minimal in childhood, old age and maximum during youth.

Yuktikritaja Bala

This type of *Bala* is acquired through the intake of nutritious foods such as ghee and milk, adherence to a proper lifestyle including regular exercise, and the judicious use of *Rasayana* and *Vajikarana* therapies. It can also be developed by introducing small quantities of antigens or toxins into the body, which stimulates the production of antibodies and enhances resistance against future diseases. The classical Ayurvedic concept of *Vishkanya* is often cited as an example of this *Yuktikrita Vyadhikshama Bala*.

बलवृद्धिकरास्त्विमे भावा भवन्ति।

तद्यथा-

बलवत्पुरुषे देशे जन्म बलवत्पुरुषे काले च, सुखश्च कालयोगः, बीजक्षेत्रगुणसम्पच्च, आहारसम्पच्च, शरीर सम्पच्च, सात्म्यसम्पच्च, सत्त्वसम्पच्च, स्वभावसंसिद्धिश्च, यौवनं च, कर्म च, संहर्षश्चेति॥१३॥

Acharya Charaka has elaborated several factors, known as *Bala Vriddhikara Bhavas*, that contribute to the enhancement of physical strength:

1. ***Desha (Place of birth)***: Individuals born in regions where people are naturally robust tend to possess better strength.
2. ***Kula (Family)***: Being born into a lineage of strong individuals contributes to inherent physical vigor.
3. ***Kala (Time)***: The period of birth influences strength; according to *Acharya Charaka*, maximum strength is observed at the end of *Visarga Kala* and the beginning of *Adana Kala*.
4. ***Sukha Kaalayoga***: Favorable environmental and lifestyle conditions support the development of good strength.
5. ***Beeja Kshetra Sampat***: The quality of reproductive elements (sperm and ovum) and the health of the uterus play a crucial role in determining strength.

6. **Aahara Sampat:** Proper nutrition is essential for building *Bala*. A wholesome diet including items like *Rakta Shali*, *Mudga Yusha*, *Saindhava*, and *Amalaka*, along with adequate rest, exercise, and the use of *Rasayana* therapies, helps in maintaining strength.
7. **Shareera Sampat:** A well-developed and compact body structure is indicative of good strength, whereas poor physique reflects weakness.
8. **Satmya Sampat:** Suitability or adaptability to specific foods and habits (*Satmya*) promotes overall well-being and strength.
9. **Satva Sampat:** Mental strength is categorized into *Pravara*, *Madhya*, and *Avara*. Individuals with superior mental strength (*Pravara Satva*) can tolerate diseases effectively, even with a smaller body frame.
10. **Swabhava Sampat:** Regular engagement in activities that promote strength enhances *Bala*. Impairment in digestive fire (*Agni*) and inadequate nutrition adversely affect the quality of *Ojas*.
11. **Yauvana (Youth):** Strength is at its peak during youth compared to childhood and old age.
12. **Karma (Exercise):** Physical activity improves muscle tone, stimulates appetite, and enhances immunity.
13. **Sanharsha:** The sense of satisfaction and pleasure following sexual activity promotes the release of endorphins, contributing to a positive mental state and overall well-being.

DISCUSSION

The present study demonstrates that *Ayurveda* explains immunity through the interrelated concepts of *Ojas*, *Bala*, and *Vyadhikshamatva*. While modern immunology describes immunity through cellular and humoral defense mechanisms, *Ayurveda* emphasizes maintenance of physiological balance and overall wellbeing as the basis of disease resistance.

The multidimensional role of *Ojas* suggests that *Ayurvedic* immunity extends beyond pathogen defense and includes maintenance of systemic stability and vitality. Its formation and maintenance depend upon proper *Agni*, adequate nutrition, and healthy *Dhatus*, which conceptually correlates with the modern role of metabolism and nutrition in maintaining immune competence. The association of *Ojas* with *Kapha* and *Bala* further indicates that immunity in *Ayurveda* extends beyond pathogen defense and includes nourishment, stability, endurance, and mental wellbeing.

The classification of *Bala* into *Sahaja*, *Kalaja*, and *Yuktikritaja* reflects concepts comparable

to innate and acquired immunity described in modern science. Similarly, *Vyadhikshamatva* represents the body's capacity to prevent disease occurrence and resist disease progression, thereby highlighting both preventive and protective aspects of immunity.

Among the *Ayurvedic* concepts related to immunity, *Ojas* appears to be the most comprehensive because it is directly associated with sustenance of life in addition to disease resistance. *Vyadhikshamatva* may therefore be considered a functional manifestation of healthy *Ojas*. Adequate *Ojas* maintains *Bala*, physiological stability, and effective immunity, whereas its depletion or vitiation results in diminished vitality, impaired resistance, and disturbance of physical and mental functions. Classical texts further emphasize that depletion of *Para Ojas* can become life-threatening and may even lead to death, whereas impairment of *Vyadhikshamatva* alone does not directly threaten survival. This suggests that *Ojas* is a broader biological principle encompassing vitality, nourishment, endurance, immunity, and preservation of life itself. Thus, *Ayurvedic* concepts provide a holistic and multidimensional understanding of immunity that may complement contemporary preventive and integrative healthcare approaches.

CONCLUSION

The present review highlights that *Ojas* forms the fundamental basis of *Bala* and *Vyadhikshamatva* in *Ayurveda*. The concepts described in classical texts demonstrate significant parallels with modern understanding of immunity and emphasize the importance of balanced nutrition, metabolism, and lifestyle in preservation of health. Thus, *Ayurvedic* principles offer a holistic framework for preventive and integrative healthcare.

REFERENCES

1. Charaka Samhita, Vidyotini hindi commentary Satya Narayana Shastri, Chaukhambha bharati Academy Varanasi (2001) Chikitsasthana.
2. Susruta: Susruta Samhita: with commentaries Nibandhasamgraha by Dalhana and Nyayacandrika by Gayadasa: edited by Vaidya Yadavji Trikamji Acharya Chaukhamba Surbharti Prakashan, Varanasi: reprint, 2012.
3. Vagbhaṭa “Aṣṭāṅgahṛdayam” reprinted 2015, Nirmala Hindi Commentary by Brahmanand Tripathi, Chaukhambha Sanskrit Pratishthan, Varanasi.
4. Ankita Sajwan, Akanksha Joshi, & Basant Kumar Thakur. Concept of Vyadhikshamatvam. *Journal of Ayurveda and Integrated Medical Sciences*, 2023; 8(7): 134–138. <https://doi.org/10.21760/jaims.8.7.25>

5. Gupta A. Ojas and Vyadhikshamatava- Ayurvedic Perspectives of Immunity and its modulation in Clinical Arena. *Journal of Natural & Ayurvedic Medicine*, 2024; 8(3): 1–15. <https://doi.org/10.23880/jonam-16000451>
6. Byadgi P S. Vyadhiksamatwa. Parameswarappa's Ayurvediya Vikriti Vigyan & Roga Vigyan, 1st edition, Volume 1. Varanasi, Chaukhambha Sanskrit Sansthan, 2007; 292-305.