WORLD JOURNAL OF PHARMACEUTICAL RESEARCH
Coden USA: WJPRAP Impact Factor 8.63
Volume 15, Issue 21, 1721-1731. Review Article ISSN 2277–7105

RASAYANA DRUGS IN OCULAR HEALTH (NETRA ROGA): SCOPE AND CLINICAL RELEVANCE – A NARRATIVE AYURVEDIC REVIEW

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Article Received on 05 Oct. 2026,
Article Revised on 25 Oct. 2026,
Article Published on 03 Nov. 2026

https://doi.org/10.5281/zenodo.23912307

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How to cite this Article: [1]*Dr. Ajay Omprakash Kadam, [2]Dr. Sujata Deepak Kate. (2026). Rasayana Drugs In Ocular Health (Netra Roga): Scope And Clinical Relevance - A Narrative Ayurvedic Review. World Journal of Pharmaceutical Research, 15(21), 1721–1731.
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ABSTRACT

Background: Ocular disorders are increasing, and Ayurveda describes Rasayana and Chaksushya measures for eye health, but the scattered literature has not been consolidated. **Objectives:** To collate classical Rasayana concepts relevant to Netra roga and to appraise the modern evidence. **Materials and Methods:** A narrative review of the classical *Ayurvedic* literature and relevant published sources. **Results:** Classical texts attribute to Rasayana the strengthening of the indriyas. Chaksushya drugs (Amalaki, Triphala, Yastimadhu, Shatavari), medicated Ghrita and Netra Kriyakalpa (Tarpana, Ashcyotana, Anjana) are the main strategies. Experimental studies of Triphala and Amalaki show antioxidant and anti-diabetic-complication effects. Small clinical studies of Ghrita preparations in dry eye and allergic conjunctivitis report symptomatic benefit but are limited by size, blinding and follow-up. Ocular evidence for Rasausadhi is absent, and quality concerns exist. **Conclusion:** Rasayana offers a coherent preventive framework for ocular health, but its clinical claims remain hypotheses requiring standardised formulations and rigorous randomised trials.

KEYWORDS: *Ayurveda, Chaksushya drugs,* Ocular rejuvenation, *Rasayana Chikitsa, Netra Roga.*

INTRODUCTION

Vision is regarded in Ayurveda as the foremost of the sensory faculties, and the classical authors repeatedly stress that the eyes must be protected throughout life. The functional integrity of the eye is attributed to *Alochaka Pitta*, supported by balanced *Vata* and *Kapha* and by well-nourished *Rasa*, *Rakta* and *Majja dhatus* (Ashtang Hridaya, Sutrasthana 12/13).[1] *Sushruta* enumerates 76 diseases of the eye (*Netra roga*) and notes the susceptibility of ocular tissues to systemic disturbance.[2]

The contemporary burden is considerable. In 2020 an estimated 43.3 million people were blind worldwide, with cataract the leading cause.[3] Age-related macular degeneration (AMD) is projected to affect about 288 million people by 2040,[4] dry eye disease has a reported prevalence ranging from 5% to 50% depending on the population and criteria,[5] and digital eye strain is common among habitual screen users.[6] Oxidative stress is a recognised contributor to several of these conditions.[7] Nutritional antioxidant supplementation is already accepted in ophthalmology for intermediate and advanced AMD,[8] which makes the Ayurvedic concept of tissue-level rejuvenation (*Rasayana*) a reasonable subject for structured appraisal.

Rasayana is defined in the *Caraka Samhita* as the means of attaining excellent *Rasa* and the other *dhatus*, and its stated benefits include longevity, memory, intellect, freedom from disease, youth, and excellent strength of the body and sense organs (*dehendriya-bala*).[9] Although the benefit to the *indriyas* is explicit, material relevant to the eye is dispersed across *Rasayana*, *Chaksushya*, *Shalakya* and *Svasthavṛtta* sources, and published laboratory and clinical work is scattered and heterogeneous. A consolidated, critical account that separates textual claims from tested hypotheses is lacking.

This review therefore aims (i) to collate classical concepts of *Rasayana* that bear on ocular health, (ii) to map the *Chaksushya* drugs, formulations, regimens and *Netra Kriyakalpa* procedures to those concepts, and (iii) to appraise the available modern evidence and its limits.

MATERIALS AND METHODS

Classical sources were read in standard printed editions: the *Caraka Samhita*, *Sushruta Samhita*, *Ashtang Hridaya* and *Bhavaprakasha Nighantu*, with their principal commentaries. Modern literature was searched in PubMed, Scopus and Google Scholar using combinations

of the terms *Rasayana*, *Ayurveda*, *Chakshushya*, *Triphala*, *Amalaki*, *Ghrita*, *Tarpana*, *Netra*, dry eye, conjunctivitis, retinopathy, macular degeneration and bhasma. Peer-reviewed experimental, clinical and review articles in English were included; non-peer-reviewed lay sources were excluded. Because the evidence base is small and heterogeneous, no quantitative synthesis or formal risk-of-bias scoring was attempted.

RESULTS AND OBSERVATIONS

Ayurvedic understanding of the eye

The doshic and dhatu correlates of ocular function are summarised in Table 1. *Alocaka Pitta* governs the perception of form and light, *Vata* the movement and neural function of the eye, and *Kapha* its lubrication and structural stability; *Rasa* and *Rakta* nourish ocular tissue, and *Majja* is linked with the optic pathway.[1] Impairment of vision is attributed to *dosha* imbalance, *dhatu-ksaya* (including that of ageing) or both, which is the rationale for age-specific preventive care.

Table 1: Doshic and dhatu correlates of ocular function in Ayurveda.

Element	Role attributed to the eye
Alocaka Pitta	Perception of form and light (visual function)
Vata	Ocular movement and nerve function
Kapha	Lubrication and structural stability
Rasa, Rakta	Nourishment and oxygenation of ocular tissue
Majja	Optic nerve and neural pathways

Types of Rasayana relevant to the eye

Three overlapping categories are recognised. *Ausadha Rasayana* comprises single drugs and compound formulations; *Ahara Rasayana* concerns diet, notably the use of *Ghrita*; and *Acara Rasayana* denotes ethical and disciplined conduct, described in the *Caraka Samhita* (Chikitsasthana 1/4/30–35).[9] Daily and seasonal regimens (*Dincharya*, *Ṛtucarya*) that protect the eye are properly classed as *Svasthavṛtta* measures; they are discussed here as supportive, not as *Acara Rasayana* in the strict textual sense.

Age-wise orientation

In childhood, when *Kapha* predominates, the emphasis is on protecting against *abhisyanda* (inflammatory ocular surface disease) and on nutrition. In adulthood, sustained visual strain, screen use and stress predominate, and ocular-surface disorders and eye strain are the common complaints. In old age, *dhatu-ksaya* and *Vata* predominance are associated with *timira* and *kacha* (roughly corresponding to visual impairment and lens opacity) and with

degenerative retinal and optic nerve disease. Typical *Rasayana* choices are *Amalaki*, *Ghrita* and *Triphala* in childhood; *Triphala Ghrita* and *Yastimadhu* in adulthood; and *Mahatriphala Ghrita* with *Amalaka Rasayana* in later life. These age allocations are traditional teaching rather than tested protocols.

Chaksushya Rasayana drugs

Amalaki and *Abhaya* (*Haritaki*), the constituents of *Triphala* with *Bibhitaka*, as well as *Amṛta* (*Guḍuci*), *Atirasa* (*Shatavari*) and *Manḍukaparni* (*Brahmi*), belong to the *Vayaḥsthapana* group of the *Caraka Samhita* (Sutrasthana 4).[9] *Triphala* is regarded in later literature as beneficial in eye disease, and *Ghrita* is valued as a vehicle that carries active principles (*yogavahi*) and is itself considered *Chaksushya*.[11] Table 2 relates the principal drugs to the strength of modern ocular evidence. *Rasayana* plant drugs are broadly reported to have antioxidant activity,[12,13] but the ocular data are mostly preclinical.

Table 2: Principal *Chaksushya Rasayana* drugs and the status of modern ocular evidence.

Drug	Reported modern pharmacology	Ocular evidence
Triphala	Antioxidant and anti-inflammatory activity[14]	Reduced oxidative and polyol-pathway markers and improved electroretinogram in diabetic rats;[15] human ocular data are limited to *Ghrita* formulations (below)
Amalaki	Rich in ascorbate and tannoids; antioxidant[16]	Delayed experimental diabetic cataract in rats[17]
Yastimadhu	Anti-inflammatory constituents; mineralocorticoid-like adverse effects[18]	No controlled ocular trial identified
Guḍuci	Immunomodulatory and antioxidant effects in experimental and some clinical studies[19]	No ocular clinical evidence identified
Ashvagandha	Reduced perceived stress in adults[20]	No ocular clinical evidence identified
Shatavari	Used as *Shatavari Ghrita*	One randomised single-blind trial in postmenopausal ocular surface disease[21]
Brahmi	Neuroprotective in experimental models	Ocular evidence limited; no ocular trial identified

Rasayana formulations

Compound formulations described in the *Rasayana* chapter of the *Caraka Samhita*, such as *CyavanapraSha* and *Amalaka Rasayana* (Chikitsasthana 1/1), are attributed to the strengthening of the *indriyas* in general,[9] and medicated *Ghritas* for the eye are described in the *Uttaratantra* of the *Ashtang Hridaya*.[1] Table 3 lists representative formulations. Eye-

specific claims for the *Cyavanaprasha* and *Amalaka Rasayana* are extrapolations from their general *Indriya-prasadana* action.

Table 3: Representative Ausadha Rasayana formulations and their textual basis.

Formulation	Textual basis	Stated ocular relevance
Cyavanaprasha	*Caraka Samhita*, Chikitsa 1/1	General *Indriya-bala*; eye-specific action inferred
Amalaka Rasayana	*Caraka Samhita*, Chikitsa 1/1	General *Indriya-bala*; *Chaksushya* by drug property
Triphala Ghrita	*Ashtang Hridaya*, Uttarasthana (eye chapters)	*Timira*, *kaca* and inflammatory eye disease
Mahatriphala Ghrita	*Ashtang Hridaya*, Uttarasthana (eye chapters)	*Timira*, *kaca* and degenerative disorders
Jivantyadi Ghrita	*Ashtang Hridaya*, Uttarasthana (eye chapters)	Nourishing (*brmhana*) eye preparation

Rasausadhi (herbo-mineral and mineral preparations)

Mineral and metallic preparations (*bhasma*) such as *Swarna*, *Loha*, *YaShada* and *Tamra* are listed in the *Rasa* literature with eye-related attributes. Their evidence in ocular disease is weak or absent. One herbo-mineral formulation, *Vasant Kusumakara Rasa*, reduced aldose reductase, vascular endothelial growth factor and inflammatory markers and improved retinal function in diabetic rats.[22] The compositional complexity of *bhasmas* has been characterised chemically,[23] but the zinc evidence in AMD derives from a defined zinc-oxide supplement in AREDS, not from *Yashada bhasma*.[8] Table 4 summarises the position.

Table 4: Rasausadhi: textual attributes and status of ocular evidence.

Preparation	Constituent relevant to eye	Ocular evidence
Swarna (Gold Bhasma)	*Chakshushyam, Ayushpradam [Rasarangini 15.70]*	Enhances cellular repair and possible retinal neuroprotection.
Yashada (Zinc Bhasma)	*Nayanamaya Nasakaram [Rasatarangini 19.12]*	Cofactor in retinal enzymes; antioxidant enzyme activation
Loha (Iron Bhasma)	*Nayanamayaghnam [Rasatarangini 20.83-86]*	Enhancing hemoglobin-mediated oxygen deliver.
Abhraka (Mica Bhasma)	*Chakshusyam, Netryam [Rasatarangini 10.72]*	Cellular rejuvenation; antioxidant support
Tamra (Copper Bhasma)	*Netramayeshu Uttamam [Ayurveda Prakasha 3.145]*	It reduces infection and antioxidant enzyme activity.
Vanga (Tin Bhasma)	*Chakshushyam [Rasa Chudamani 14.134]*	Possible epithelial regeneration support

Dincharya and supportive regimens

Daily practices that protect the eye are described among the *Svasthavṛtta* measures of the *Caraka Samhita* (Sutrasthana 5) and the *Sushruta Samhita* (Chikitsasthana 24).[2,9] Table 5

relates them to modern protective measures, labelled as hypotheses where the link is inferential. The best-supported correlate is use of a hat or umbrella (*Chatra-dharana*), consistent with the role of ultraviolet exposure in ocular disease.[24]

Table 5: Dincharya practices relevant to the eye and plausible modern correlates.

Practice	Rationale in the texts	Modern correlate
Anjana	Daily collyrium for clarity of vision	Surface cleansing; unproven, and quality control of *Anjana* is a safety issue
Netra-praksalana	Washing of the eyes	Hygiene; unproven for prevention
Chatra-dharana	Protection from sun	Ultraviolet protection[24]
Padatra-dharana	Foot protection; *Chaksushya* per tradition	No ocular correlate established
Padabhyanga	Soothing; promotes sleep and vision per tradition	Relaxation; no ocular correlate established
Nasya	Direct route to the head and sense organs	Hypothesis only; no ocular trial identified

Pancakarma and Netra Kriyakalpa

Virecana is used for *Pitta* disorders such as *abhisyanda* and *timira*, and *Nasya* is considered to act on the sense organs. The local procedures of *Netra Kriyakalpa*, described in the *Uttaratantra* of the *Sushruta Samhita* (Chapter 18),[2] deliver medicated preparations to the eye and are summarised in Table 6. Doses and retention times (in *matra*) vary between texts and are not tabulated here; the statement that these procedures raise the efficacy of internal *Rasayana* through *srotas-Shuddhi* is a traditional proposition without comparative testing.

Table 6: Netra Kriyakalpa procedures.

Procedure	Description	Traditional indication
Ashcyotana	Instillation of medicated drops into the open eye	*Abhisyanda*, redness, irritation
Seka	Continuous pouring of liquid over closed eyes	Burning, redness, acute congestion
Anjana	Application of collyrium to the inner lid margin	*Kapha* disorders; clarity of vision
Tarpana	Retention of medicated *Ghrita* over the open eye within a dough ring	Nourishment; degenerative and dry conditions
Putapaka	Medicated juice retained after *Tarpana* (or as an alternative)	Strengthening of ocular tissue
Pinḍi	Warm or cool medicated bolus over closed lids	Swelling and pain
Bidalaka	Medicated paste applied to the lids, avoiding lashes	Redness, itching, local inflammation

Modern clinical and experimental evidence

The clinical evidence is dominated by *Ghrita* preparations in ocular-surface disease. An open-label randomised comparative trial evaluated *Triphala Ghrita* and *Goghrita Manda Tarpana* in dry eye,[25] and a comparative study evaluated *Triphala Ghrita Ashcyotana* against alcaftadine 0.25% eye drops in allergic conjunctivitis (n=60).[26] A randomised single-blind trial of 120 postmenopausal women with mild-to-moderate dry eye found greater improvement in Ocular Surface Disease Index, Schirmer test and tear film break-up time with *SHatavari Ghrita* than with *Triphala Ghrita* (both with oral *Shatavari Ksirapaka*), without a between-group difference in quality of life; formal allocation concealment was not used.[21] In a murine benzalkonium chloride dry eye model with 12 animals, *Ghrita Manda Ashcyotana* improved tear film break-up time and lowered IL-6 expression relative to preservative-free drops.[27] In retinopathy, *Triphala* ameliorated biochemical and functional changes in diabetic rats.[15]

DISCUSSION

The textual case for *Rasayana* in ocular health is coherent: the eye is a *Pitta*-dominant organ, ageing is understood as progressive *dhatu-ksaya*, and *Rasayana* is intended to preserve *dhatu* quality and sensory function.[9] The modern evidence reviewed above is consistent in direction with that framework, but it is thin. Antioxidant and anti-inflammatory activity of *Triphala* and *Amalaki* is established in the laboratory, whereas the human data are small trials of *Ghrita* preparations in ocular-surface disease. The most recent trial is single-blind and lacked allocation concealment,[21] the murine study used 12 animals,[27] and several trials cannot separate the effect of the drug from that of the delivery procedure or the lipid vehicle. Claims that *Rasayana* prevents degeneration, addresses the root cause of disease or is superior to conventional ophthalmic drugs are not supported by comparative or long-term data and should be treated as hypotheses.

There is a conceptual parallel with modern practice: antioxidant and mineral supplementation reduces progression of intermediate AMD.[8] The parallel is not evidence for *Rasayana*, but it shows that a nutrition-based preventive strategy can be tested rigorously. The same standard should apply here: pre-registered randomised trials with validated endpoints (for example Ocular Surface Disease Index, tear break-up time, Schirmer test), allocation concealment, adequate follow-up, and reporting of adverse events.

Safety and quality

Safety deserves explicit attention. *Yastimadhu* has mineralocorticoid-like effects with prolonged or high intake.[18] Heavy metals were detectable in about one in five Ayurvedic products sold online in one survey, which underlines the need for quality-controlled *bhasma* and *Anjana* preparations.[28] Ocular instillation of non-sterile, non-standardised preparations carries a risk of infection and injury; sterility, preservative status and formulation standardisation are prerequisites for any trial of *AShcyotana*, *Tarpana* or *Anjana*. *Rasausadhi* should not be used in the eye in the absence of ocular safety data.

Limitations

This is a narrative review without systematic screening, quantitative synthesis or formal risk-of-bias assessment, and relevant non-indexed sources may have been missed. Classical statements are interpreted from standard printed editions, and verse numbering and readings differ between editions.

CONCLUSION

Rasayana provides a well-articulated preventive and restorative framework for ocular health in Ayurveda, centred on *Chaksushya* drugs such as *Amalaki* and *Triphala*, medicated *Ghrita* and *Netra Kriyakalpa*. Experimental data support antioxidant and metabolic effects, and small clinical studies suggest symptomatic benefit of *Ghrita* preparations in ocular-surface disease, but robust evidence for prevention of degenerative eye disease is absent. Standardised, quality-controlled formulations and adequately designed randomised trials are needed before clinical claims can be made.

ACKNOWLEDGEMENTS

I express my heartfelt gratitude to my respected supervisor for their continuous guidance, valuable suggestions, and support throughout this research. I sincerely appreciate everyone who supported and contributed to this work, directly or indirectly.

REFERENCES

1. Vagbhata. *Ashtang Hridaya*, with Sarvangasundara commentary of Arunadatta. Varanasi: Chaukhambha Orientalia.
2. Sushruta. *Sushruta Samhita*, with Nibandhas angraha commentary of Ḍalhanacharya. Acharya YT, editor. Varanasi: Chaukhambha Orientalia.
3. Steinmetz JD, Bourne RRA, Briant PS, Flaxman SR, Taylor HRB, Jonas JB, et al. Causes

of blindness and vision impairment in 2020 and trends over 30 years, and prevalence of avoidable blindness in relation to VISION 2020: the Right to Sight: an analysis for the Global Burden of Disease Study. Lancet Glob Health, 2021; 9(2): e144–60.

4. Wong WL, Su X, Li X, Cheung CMG, Klein R, Cheng CY, et al. Global prevalence of age-related macular degeneration and disease burden projection for 2020 and 2040: a systematic review and meta-analysis. Lancet Glob Health, 2014; 2(2): e106–16.
5. Stapleton F, Alves M, Bunya VY, Jalbert I, Lekhanont K, Malet F, et al. TFOS DEWS II epidemiology report. Ocul Surf, 2017; 15(3): 334–65.
6. Sheppard AL, Wolffsohn JS. Digital eye strain: prevalence, measurement and amelioration. BMJ Open Ophthalmol, 2018; 3(1): e000146.
7. Ung L, Pattamatta U, Carnt N, Wilkinson-Berka JL, Liew G, White AJR. Oxidative stress and reactive oxygen species: a review of their role in ocular disease. Clin Sci (Lond), 2017; 131(24): 2865–83.
8. Age-Related Eye Disease Study Research Group. A randomized, placebo-controlled, clinical trial of high-dose supplementation with vitamins C and E, beta carotene, and zinc for age-related macular degeneration and vision loss: AREDS report no. 8. Arch Ophthalmol, 2001; 119(10): 1417–36.
9. Agnivesha. *Caraka Samhita*, revised by Caraka and Drudhabala, with Ayurveda Dipika commentary of Cakrapanidatta. Acharya YT, editor. Reprint ed. Varanasi: Chaukhambha Orientalia, 2011.
10. Baethge C, Goldbeck-Wood S, Mertens S. SANRA—a scale for the quality assessment of narrative review articles. Res Integr Peer Rev., 2019; 4: 5.
11. BhavamiShra. *BhavaprakaSha Nighantu*. Varanasi: Chaukhambha Bharati Academy.
12. Balasubramani SP, Venkatasubramanian P, Kukkupuni SK, Patwardhan B. Plant-based Rasayana drugs from Ayurveda. Chin J Integr Med., 2011; 17(2): 88–94.
13. Govindarajan R, Vijayakumar M, Pushpangadan P. Antioxidant approach to disease management and the role of 'Rasayana' herbs of Ayurveda. J Ethnopharmacol, 2005; 99(2): 165–78.
14. Peterson CT, Denniston K, Chopra D. Therapeutic uses of Triphala in Ayurvedic medicine. J Altern Complement Med., 2017; 23(8): 607–14.
15. Suryavanshi SV, Barve K, Utpat SV, Kulkarni YA. Triphala churna ameliorates retinopathy in diabetic rats. Biomed Pharmacother, 2022; 148: 112711.
16. Variya BC, Bakrania AK, Patel SS. Emblica officinalis (Amla): a review for its phytochemistry, ethnomedicinal uses and medicinal potentials with respect to molecular

mechanisms. Pharmacol Res., 2016; 111: 180–94.

17. Suryanarayana P, Saraswat M, Petrash JM, Reddy GB. Emblica officinalis and its enriched tannoids delay streptozotocin-induced diabetic cataract in rats. Mol Vis., 2007; 13: 1291–7.
18. Pastorino G, Cornara L, Soares S, Rodrigues F, Oliveira MBPP. Liquorice (*Glycyrrhiza glabra*): a phytochemical and pharmacological review. Phytother Res., 2018; 32(12): 2323–39.
19. Upadhyay AK, Kumar K, Kumar A, Mishra HS. *Tinospora cordifolia* (Willd.) Hook. f. and Thoms. (Guduchi) – validation of the Ayurvedic pharmacology through experimental and clinical studies. Int J Ayurveda Res., 2010; 1(2): 112–21.
20. Chandrasekhar K, Kapoor J, Anishetty S. A prospective, randomized double-blind, placebo-controlled study of safety and efficacy of a high-concentration full-spectrum extract of ashwagandha root in reducing stress and anxiety in adults. Indian J Psychol Med., 2012; 34(3): 255–62.
21. Ashwini BN, Sivabalaji K, Bhutada R, Janardhanan RS. Comparative efficacy of Shatavari Ghrita eye drops with Shatavari Ksheerapaka versus Triphala Ghrita eye drops with Shatavari Ksheerapaka in postmenopausal ocular surface disease: a randomized, single-blind trial. Front Med (Lausanne), 2026; 13: 1824324. doi:10.3389/fmed.2026.1824324
22. Singh AD, Chawda MB, Kulkarni YA. Vasant Kusumakar Rasa reduces neovascularisation, oxidative stress, inflammation and improves retinal function in diabetic rats. J Mol Histol, 2026; 57(3): 180.
23. Kumar A, Nair AG, Reddy AV, Garg AN. Bhasmas: unique Ayurvedic metallic-herbal preparations, chemical characterization. Biol Trace Elem Res., 2006; 109(3): 231–54.
24. Yam JC, Kwok AKH. Ultraviolet light and ocular diseases. Int Ophthalmol, 2014; 34(2): 383–400.
25. Timmapur GM, Fiaz S. Efficacy of Triphala Ghrita and Goghrita Manda Tarpana in the management of Shushkakshipaka w.s.r. to dry eye syndrome: an open labelled randomized comparative clinical trial. AYU., 2020; 41(1): 52–7. doi:10.4103/ayu.ayu_108_18
26. More TM, Deshmukh A, Bargal R, Jori R. Comparative clinical study of Triphala Ghrita Aschyotan and alcaftadine (0.25%) eye drop in the management of Vataj Abhishyanda w.s.r. to simple allergic conjunctivitis. Int J Ayurvedic Med., 2023; 13(4): 910–4. doi:10.47552/ijam.v13i4.3026

27. Janardhanan RS, Kundrinmani S, Nagaraj AB. Therapeutic effects of Ghrita Manda Ashchyotana on tear film stability, corneal integrity, and IL-6 expression in a benzalkonium chloride-induced murine dry eye model. J Ayurveda Integr Med., 2026; 101354. doi:10.1016/j.jaim.2026.101354
28. Saper RB, Phillips RS, Sehgal A, Khouri N, Davis RB, Paquin J, et al. Lead, mercury, and arsenic in US- and Indian-manufactured Ayurvedic medicines sold via the Internet. JAMA, 2008; 300(8): 915–23.