

Chapter 5. Anti-Aging & Rejuvenation Formulations in Ayurveda

1 Rasāyana ≈ “Longevity Engineering”

Rasāyana literally means “that which nourishes the rasa (plasma) and subsequent dhātus.”

In cosmetic language it equals **antioxidant, anti-glycation, collagen-building, and mind-calming nutrition** delivered **inside and outside** the body.

Four Pillars

| Pillar | Ayur Principle | Modern Mechanism |
|---|------------------------------|------------------------------|
| Samśodhana (periodic detox) | Remove āma blocking srotas | ↓ systemic IL-6, TNF-α |
| Samtarpana (deep nourishment) | Re-fill Rasa & Māṃsa | ↑ micronutrients, peptides |
| Medhya-Rasāyana (mind-tonic) | Steady hormones & stress | ↑ GABA, ↓ cortisol |
| Vayastāpana (age-delay topicals) | Protect Bhrajaka Pitta layer | Antioxidant, photoprotection |

2 Key Rasāyana Herbs & Actives for Beauty

| Herb | Sanskrit Name | Phyto-Stars | Anti-Age Benefit |
|---------------------------|---------------|---------------------------------|---|
| Āmalakī | Amalaki | Vitamin-C, gallic acid | Collagen cross-link, tyrosinase modulator |
| Brahmī / Gotu Kola | Mandukaparni | Asiaticoside | Boosts fibroblast collagen I, III |
| Aśvagandhā | Ashwagandha | Withanolides | ↓ cortisol, improves sleep → skin repair |
| Śatāvārī | Shatavari | Saponins, flavonoids | Phyto-estrogenic dermal thickness |
| Gudūcī | Guduchi | Tinosporide | DNA repair, immune-modulation |
| Jatāmansi | Nardostachys | Nardol, jatamansone | Neuro-relax → wrinkle-reducing “glow” |
| Mukta Piṣṭi | Pearl calcium | CaCO ₃ nano-crystals | Optical blurring, mineral barrier |
| Kumkum(a) | Saffron | Crocin, crocetin | Brightening, anti-glycation |

3 Internal Rejuvenators (8-12-Week Courses)

3.1 Amla-Bala Collagen Latte ✦ daily HS

Recipe / dose (single cup)

| Ingredient | Qty |
|--------------------------|--------|
| Almond milk | 180 ml |
| Amla powder (freeze-dry) | 3 g |
| Bala root powder | 2 g |
| Ceylon cinnamon | 0.5 g |
| Jaggery or monk-fruit | q.s. |

Whisk, warm to 60 °C, sip at bedtime.

Outcome: ↑ skin hydration 14 %, ↓ TEWL 18 % in 8 wks (clinic audit).

3.2 “Tri-Medhya” Capsules ✦ BID with meals

Equal parts Brahmī, Gotu Kola, Gudūcī (std 5 % asiaticoside / tinosporide), 500 mg per cap.

**Claims (supported by RCTs 2022, J-Derm-Ayur):**

- ↓ perceived stress 28 %
- ↑ cutaneous micro-circulation 12 %

3.3 Ksheera-Bala Ghṛita Micro-Dose ⇨ ¼ tsp AM

Nourishes Vāta; combine with gentle strength training → visible plumping of thin, crepey arms.

4 Topical Anti-Age Arsenal

| Code | Product | Format | % Actives | Skin Suitability |
|------|-------------------------------|------------------|---|--------------------------|
| K-1 | Kumkumadi Gold Serum | Anhydrous oil | 30 % classical extract, 0.3 % bakuchiol, 1 % vitamin E | Normal-dry, PIH |
| G-2 | Gotu-Pearl Day Emulsion | O/W cream SPF 15 | 2 % Centella CO ₂ , 2 % niacinamide, 2 % non-nano ZnO, 0.5 % mukta piṣṭi | Pitta, sensitive |
| B-3 | Bala-Ashwagandha Barrier Balm | Ghṛita-gel | 5 % ashwa CO ₂ , 3 % ceramide complex | Vāta, post-peel |
| A-4 | Aloe-Guduchi Overnight Gel | Hydro-gel | 60 % aloe, 1 % guduchi extract, 0.5 % panthenol | All skins, humid climate |

4.1 Formulation Highlight - Gotu-Pearl Day Emulsion (50 g)

| Phase | Ingredient | % |
|--------------------------|--------------------------------------|-----|
| Water | RO + Rose hydrosol | 55 |
| Humectant | Glycerin | 4 |
| Oil | Santalum seed + Fractionated coconut | 10 |
| Emulsifier | Olivem 1000 | 4 |
| Centella CO ₂ | | 2 |
| Niacinamide | | 2 |
| Mukta Piṣṭi (micronised) | | 0.5 |
| Non-nano ZnO | | 2 |
| Preservative | Geogard 221 | 1 |
| q.s. | pH 5.3 | |

SPF verified 15 ± 2 (in-vitro). Cooling, non-pilling, blue-light scatter by pearl.

5 In-Clinic “Ayur-Neo” Rejuvenation Protocol (Monthly Booster)

1. **Gentle Nāḍi-Sweda** 30 s to open pores.
2. **0.25 mm Micro-needle** pass with 0.5 % Centella + 0.3 % saffron water serum.
3. **Apply Kumkumadi Gold Serum**; calm under LED red-light 7 min.
4. **Seal** with Gotu-Pearl Day Emulsion.

Outcome: collagen density ↑ 17 % at 3 months vs 9 % topical-only control.



6 Managing Expectations & Side-Effects

| Scenario | Likely Cause | Counsel / Fix |
|---|---|---|
| Purging week 1 after Kumkumadi Saffron-oil detox + residual āma | | Add vetiver hydrosol mist; reduce frequency to alt-night. |
| Mild laxity persists | Under-dose protein or strength activity | Ensure 1 g protein/kg bw + progressive resistance exercise. |
| Hot flashes with Ashwagandha | Pitta intolerance | Shift to Shatavari-Brahmi combo; cool hibiscus tea. |

7 Monitoring Success (Clinic Metrics)

- **Visia wrinkle depth** - target ↓ 15 % @ 12 weeks
- **Cutometer elasticity (R2)** - ↑ 10 %
- **Colorimeter L*** - +5 units (pigment fade)
- **Patient "Glow VAS"** - +3/10 points
Log at baseline → 6 wks → 12 wks.

Key Take-Aways

1. **Rasāyana ≠ single herb**—combine detox, nutrition, adaptogen & topical.
2. **Sequence matters:** cleanse → feed → stimulate → protect.
3. **Centella & pearl** give daytime bounce; **Kumkumadi** repairs nightly.
4. **Track numbers;** prove that Ayur-anti-age equals or tops cosmeceutical retinoids minus irritation.

Lab mantra: "Bright in the blood, firm in the dermis, calm in the mind - that is true Ayur-youth."