

## EVALUATING THE ROLE OF SWARNA PRASHAN IN ENHANCING PEDIATRIC IMMUNITY AND COGNITIVE FUNCTION: A RIGOROUS ASSESSMENT

Dr. Sonam Angial\*, Prof. Mahesh Narayan Gupta

<sup>1</sup>P.G Scholar, P.G Department of Kaumarbhritya State Ayurvedic College Lucknow.

<sup>2</sup>Proffessor and H.O.D, P.G Department of Kaumarbhritya State Ayurvedic College Lucknow.

Article Received on 30 Oct. 2025,  
Article Revised on 20 Nov. 2025,  
Article Published on 01 Dec. 2025,  
<https://doi.org/10.5281/zenodo.17747081>

### \*Corresponding Author

Dr. Sonam Angial

P.G Scholar, P.G Department of  
Kaumarbhritya State Ayurvedic  
College Lucknow.



**How to cite this Article:** Dr. Sonam Angial, Prof. Mahesh Narayan Gupta. (2025). Evaluating The Role Of Swarna Prashan In Enhancing Pediatric Immunity and Cognitive Function: A Rigorous Assessment. World Journal of Pharmaceutical Research, 14(23), 391–399.

This work is licensed under Creative Commons Attribution 4.0 International license.

### ABSTRACTS

Swarnaprashana—the administration of processed gold to children—as first detailed by Acharya Kashyapa. Thousands of years ago, Kashyapa advocated for the use of *Swarna* (gold) to enhance intellect, digestion and metabolism, physical strength, immunity, complexion, fertility, and life. Various classical Ayurvedic texts describe formulations of processed gold, often combined with herbal drugs, for prolonged use in children. Within Ayurveda, Swarnaprashana is primarily utilized in two contexts: *Lehana* (supplementary feeds) and *Jatakarma Samskara* (newborn care). This review aims to dispel common misconceptions by critically analyzing the available data, including the age, method of administration, benefits, and dosage described in classical Ayurvedic textbooks, alongside related scientific studies. We propose that the benefits of Swarnaprashana are multifaceted, functioning as a general

health promoter while specifically enhancing areas like intelligence, digestion, metabolism, immunity, physical strength, complexion, and fertility. Ayurveda mandates the use of only purified and processed gold for internal consumption. The optimal age and duration of Swarnaprashana administration should be determined based on the desired positive health outcomes for the child.

**KEYWORDS:** Ayurveda, children, gold preparation, immuno-modulator, *Swarnaprashana*.

## INTRODUCTION

The significance of metals and minerals has been acknowledged by humans for millennia, with Gold holding the status of the most precious metal. Historically, gold was fashioned into sculptures, ornaments, and coins globally. It is also one of the oldest metals recognized for its preventive and curative applications.

In India, the earliest known reference to gold dates back to the prehistoric period, where it is mentioned as (a synonym for) in Vedic texts.

### Gold and Rites of Passage

Ancient Indian literature on rectitude, such as the, outlines (purificatory rites) for a (Brahmin) to cleanse impurities from the (sperm and ovum) and the effects of being a (fetus) in the womb.

One such rite is the (newborn care). This purification procedure mandates that immediately after the umbilical cord is cut, the baby should be made to lick a mixture of gold, honey, and ghee, accompanied by the chanting of a (spiritual hymn)

**Ayurveda** extensively incorporates gold, citing its diverse medicinal properties and uses.

- **Classification:** Gold is one of the (seven metals) and is categorized as (pure metal), possessing both preventive and protective qualities.
- **Reproductive and Prenatal Use:** Gold is recommended even *before* conception for its (rejuvenator) and (aphrodisiac) properties to help conceive a healthy baby. Post-conception, it's used in (a procedure for desired sex and proper fetal growth).
- **Infancy and Childhood**
  - It plays a vital role in and is given as (supplementary feeds).
  - As the child matures, gold, either alone or with herbs, is advised for boosting (digestive power and metabolism), (physical strength and immunity), (intellect), (color and complexion), and (lifespan).
- **Protective Action:** Gold's protective properties are even indicated on the deathbed when (fatal signs) are observed.

Gold is thus considered a noble metal with significant effects on the human body, spanning from pre-conception until death.

Ayurvedic texts stress that gold must only be used internally after proper purification. Failure to adhere to this process can lead to complications, potentially even becoming life-threatening. The texts also clearly specify the type of gold to be used, the modes of administration, and the therapeutic benefits and indications of its various form.

## Methods

A methodical collection of data from classical texts of Ayurveda as well as related pharmacoclinical research articles and dissertation works published in between May 1977 to November 2011 have been collected using PubMed and manual search of bibliographies as the sources.

## Swarnaprashana: An Ayurvedic Practice for Child Development

The practice of Swarnaprashana, or the administration of gold (Swarna) to infants and children, is a unique and esteemed tradition within Ayurveda. This concept is found across various classical texts, primarily in the contexts of Lehana (supplementary feeding) and Jatakarma Samskara (newborn rites).

## Origin and Preparation (Lehana Context)

The term Swarnaprashana was coined by Acharya Kashyapa to describe the administration of gold as a supplementary feed.

- **Preparation:** The traditional method involves triturating (rubbing) gold along with water, honey, and ghee (clarified butter) on a clean stone, while facing the eastern direction.
- **Administration:** The resulting paste is then given to the Shishu (infant) to lick.
- **Timing (Lehana):** In this context, it is administered to the Shishu (infant) as a regular supplementary feed. Acharya Sushruta suggested its administration with herbs like *Shankhapushpi*, *Kushtha*, and *Vacha* for a period of one year.

## Benefits of Swarnaprashana

The benefits ascribed to Swarnaprashana emphasize enhancing a child's overall growth, development, and well-being, particularly during Shaishavavastha (infancy), a period of rapid development.

Benefit Category	Sanskrit Term	Description
Cognitive/Physical	Medha Agni Bala Vardhanam	Improvement of intellect, digestion/metabolism ( <i>Agni</i> ), immunity, and physical strength ( <i>Bala</i> ).
Longevity/Aesthetics	Ayushyam / Varnyam	Promoting lifespan ( <i>Ayushyam</i> ) and enhancement of color/complexion ( <i>Varnyam</i> ).
Spiritual/Protection	Mangalam / Punyam / Grahapaham	Bringing auspiciousness ( <i>Mangalam</i> ),

		righteousness ( <i>Punyam</i> ), and protection from evil spirits and microorganisms ( <i>Grahapaham</i> ).
Other	Vrushyam	Described as aphrodisiac (in terms of potential long-term development).

### Benefits based on Duration

- **1 Month:** The baby is said to become Parama Medhavi (highly intelligent) and Vyadhibhir Na Cha Drusyate (will not be affected by any disease).
- **6 Months:** The baby is said to become Srutadhara (able to remember things just heard).

### Administration at Birth (Jatakarma Samskara)

Acharya Sushruta and Acharya Vagbhata describe the use of gold in the Jatakarma Samskara (newborn care rites), soon after birth.

- **Sushruta's View:** Cited the administration of gold along with honey and ghee as a single dose at birth. The rationale was to provide preventive and nutritive support
- to the newborn, as adequate breast milk secretion is not always available for the first few days.
- **Vagbhata's View:** Advised giving a combination of herbal drugs in a specific gold spoon shaped like a holy banyan tree leaf to increase Medha (intellect). He also mentioned combining gold with specific herbs during Jatakarma Samskara.

**Key Combination:** In almost all references, gold (Swarna) is said to be administered along with honey and ghee. Acharya Vagbhata also listed specific herb combinations with gold for those desiring Ayu (lifespan), Medha (intellect), Lakshmi (wealth), and Kama (sensual enjoyment).

In summary, Swarnaprashana is an ancient method of administering gold, honey, and ghee (often with selected herbs) to children, aiming to boost intelligence, immunity, and overall vitality, administered either as a single dose at birth or as a routine supplementary feed during infancy.

### Dosage Considerations for Swarnaprashana in Children

Acharya Kashyapa, while not providing a specific dosage for Swarnaprashana, did lay down general dosage guidelines for children according to age from birth in the same context, which can be adapted to determine the appropriate Swarnaprashana dosage.

To establish a dose for children, one can reference the following available adult dosages of Swarna Bhasma (calcined gold ash) from various texts:

- 15–30 mg (1/4th–1/8th Ratti)<sup>[3]</sup>
- 250 mg (2 Gunja)<sup>[4]</sup>
- 125 mg (1 Gunja) / As per age<sup>[8]</sup>
- 1 Harenu<sup>[9]</sup>
- 3.9 mg (1/32 Ratti)<sup>[14]</sup>
- 15.5–62.5 mg<sup>[15]</sup>

### Dosage Calculation in Pediatrics

These adult reference standards can be used to calculate an appropriate pediatric dosage.<sup>[16]</sup>

The final dosage of Swarnaprashana should be fixed by adapting the general guidelines mentioned by Acharya Kashyapa or by scaling down the adult Swarna Bhasma dosages based on the child's age, weight, or standard pediatric dosage rules.

### Forms of swarna

According to classical Ayurveda, Swarna (gold) is prepared for internal administration in specific forms such as Patala/Mandala (leaf/foil), Churna (powder), and Bhasma (ash).

### Safety measures

The perceptiveness of the Acharyas regarding potential adverse effects from the administration of impure gold is evident in the detailed procedures for Swarna Shodhana (purification). Classical sources warn that improperly processed Swarna may detrimentally affect an individual's happiness, potency, and strength, precipitate disease complexes, and has been cited to cause mental disturbances and even mortality.

### DISCUSSION

The term Swarnaprashana was coined by Acharya Kashyapa.<sup>[7]</sup> Based on various classical references, Swarnaprashana refers to the administration of gold, either alone or combined with herbs, in a semi-solid or linctus form (Leha/Prasha). Kashyapa described this practice within the context of Lehana (nourishing/tonic preparations). Lehana is specifically indicated for healthy children who are experiencing compromised breastfeeding or minor functional metabolic issues. Importantly, it is contraindicated for children who are seriously ill and should not be administered on a daily basis.<sup>[7]</sup>

Swarnaprashana is indicated for all children due to its documented efficacy in enhancing nutrition, metabolism, growth, development, physical strength, and immunity. This preparation is unique as it is the only form of gold therapy in Ayurveda with described benefits tied directly to the duration of administration. Although Lehana preparations are generally contraindicated for daily use, Acharyas have stipulated that Swarnaprashana alone can be continued for 1 to 6 months to achieve its specific benefits in pediatric health. Further research is necessary to reestablish and validate these duration-specific benefits.

The prominence of Swarnaprashana is highlighted by its position as the first formulation mentioned in the *Lehadhyaya* of the Kashyapa Samhita. Based on its prescribed indications, the optimal time for initiation is the Shaishava Avastha (infancy/early childhood). Acharya Kashyapa likely recognized the physiological importance of gold thousands of years ago, leading to its inclusion as a significant therapeutic metal. This precise focus on the pediatric age group suggests a specific beneficial action of gold in children, a theory supported by recent studies. Research has measured trace elements, including gold, in the human placenta and newborn liver<sup>[17]</sup>, as well as in the hair of newborn infants.<sup>[18]</sup> Furthermore, a pharmacoclinical study in neonates demonstrated that the combination of Madhu-Ghrita-Swarna-Vacha significantly impacted the immunological system, evidenced by enhanced humoral antibody formation and a rise in total proteins and serum IgG levels.<sup>[19]</sup> The classical indication for Swarnaprashana as an enhancer of intelligence and cognitive functioning suggests its use from birth, particularly for continuous periods of one or six months. This traditional claim aligns with modern findings where colloidal gold was found to improve cognitive functioning and increase IQ scores.<sup>[26]</sup> Beyond cognition, the development of the reproductive system in adolescence also makes this a relevant time for Swarnaprashana administration to potentially act as a fertility enhancer. The presence of gold in the reproductive system is well-documented: it has been detected in the human endometrium and decidua<sup>[23]</sup> and found at very high levels in semen, which is considered the richest biological source of gold reported.<sup>[24]</sup> An animal study further demonstrated a significant stimulatory effect of gold chloride on female reproductive activity.<sup>[25]</sup>

For its effects as an intelligence enhancer, classical texts recommend administering Swarnaprashana from birth, specifically suggesting continuous courses of one or six months. This traditional claim is supported by a study where colloidal gold was found to improve cognitive functioning, as evidenced by increased IQ scores.<sup>[26]</sup> Determining the most

appropriate form of gold for administration is a significant challenge, given the variety of Swarna forms mentioned. Acharya Kashyapa specified using Kanaka (a synonym for gold) triturated with water, honey, and ghee.<sup>[7]</sup> This method likely reflects the historical context, where micro-particles of pure gold could be directly obtained by rubbing the metal on a stone for easy administration.

The later inclusion of other Swarna forms, particularly Bhasma (calcined ash), is likely a result of the advancements in Ayurvedic pharmaceutical methods, such as the emergence of Rasasastra (Ayurvedic metallurgy) as a specialized branch. The ideal form of gold for internal use must possess superior bioavailability. While the bioavailability of all Swarna forms remains to be conclusively established, current research on Swarna Bhasma (SB) suggests it contains gold nanoparticles. These particles are typically globular, with an average size of 56–57 nm.<sup>[27]</sup> Further blood compatibility studies confirm that SB is composed of gold nanoparticles with a crystallite size of 28–35 nm and approximately 90% purity.<sup>[28]</sup> This particle size is critical, as research indicates that the gastrointestinal uptake of colloidal gold is dependent on particle size, with smaller particles crossing the gut barrier more readily.<sup>[29]</sup> Due to the high sensitivity of children's bodies and their rapid state of growth and development, even minor negligence in drug administration can lead to serious adverse effects. The Acharyas (Ayurvedic scholars) held a clear understanding of the crucial importance of refining Swarna (gold) before internal use. This is evident in their specific warnings regarding the severe adverse effects of improperly processed gold. Depending on the form chosen, suitable processing is mandatory: pure gold requires proper purification (Shodhana), and Bhasma (calcined ash) requires both purification and proper incineration (Marana). Modern studies support the safety of these preparations, reporting that Swarna Bhasma particles are non-cytotoxic<sup>[28]</sup> and that a chronic toxicity study of Swarnabindu prashana showed no cytotoxicity.<sup>[30]</sup> While Acharya Kashyapa did not prescribe a specific day or time for Swarnaprashana administration, he did mention facing the east direction during its preparation. However, in the context of *Rasayana*<sup>[5]</sup> and *Pumsavana Karma*<sup>[6]</sup>, Acharyas Sushruta and Charaka respectively referenced the use of Swarna on Pushya Nakshatra (an auspicious star in the Hindu calendar). The currently popular practice of administering Swarnaprashana only on Pushya Nakshatra days likely stems from the belief that it is an auspicious time for medication due to the star's nourishing properties.<sup>[31]</sup> Nevertheless, administering the preparation only once a month without established age-appropriate dosage fixation may not deliver the benefits described in classical texts. Further



scientific investigation is crucial to clarify this practice and establish unambiguous guidelines.

## CONCLUSION

Swarnaprashana fundamentally signifies the administration of gold, either in its pure form alone or combined with various herbs, without mandate for a specific day or time. A critical challenge is selecting the optimal form of gold, which must prioritize better bioavailability, minimal adverse reactions, and ease of preparation and administration. These parameters urgently require standardization through scientific studies. The indiscriminate use of Swarnaprashana regarding dose, duration, and patient condition will inevitably lead to adverse effects, particularly in sensitive pediatric systems. To validate and re-establish the traditional benefits cited by Acharya Kashyapa and other scholars, comprehensive investigation using both experimental models and clinical trials is essential. The effects of Swarnaprashana in children are multidimensional, positioning it, in essence, as a positive pediatric health care program.

## Footnotes

**Source of Support:** Nil.

**Conflict of Interest:** None declared.

## REFERENCES

1. Bhatta K, Pt. Haragovinda Sastri, editors. 7th ed. Varanasi: Chaukhambha Sanskrit Sansthan; 2003. Manu, Manusmruti, 2/27-29; 43. [Google Scholar]
2. Chakrapanidatta, Commentator. Charaka Samhita, Sharira Sthana, Jatisutriya Adhyaya, 8/19; 343. Varanasi: Chaukhambha Chaukhambha Sanskrit Sansthan; 2004. [Google Scholar]
3. Dalhana, Commentator. Susrutha Samhita, Chikitsa Sthana, Kshudraroga Chikitsa, 28/10.21, reprint ed; 501–2. Varanasi: Chaukhamba Orientalia; 2005. [Google Scholar]
4. Shri Satyapal Bhishagacharya., editor. Vridha Jivaka, Kashyapa Samhita, Sutra Sthana, Leha Adhyaya. In: 10th ed. Chaukhambha Sanskrit Sansthan: Varanasi, 2005; 4–5. [Google Scholar]
5. Kashinath Shastri., editor. 11th ed. New Delhi: Motilal Banarasidas; 2009. Sadananda Sharma, Rasataranagini, 15th Taranga, 2-3, 14, 27; 361–67. [Google Scholar]
6. Kulkarni DA, editor. New Delhi: Meharchand Lachhmandas Publications; 1998. Vagbhata, Rasaratna Samuchaya, Vol. 1, 5/1,11,18; 13–6. [Google Scholar]



7. Pandey G. 1st ed. Delhi: Sri Satguru Publications; Traditional Medicine in South-East Asia and Indian Medical Science, 1997; 40–1. [Google Scholar]
8. Anonymous. Part-I, Sect 18:20. 2nd ed. Delhi: The Controller of Publications, Govt of India; The Ayurvedic Formulary of India, 2003; 247. [Google Scholar]
9. Dalhana commentator. Sushruta Samhita, Sharira Sthana, Garbhiniyavakaraṇa Adhyaya, 10/68-70, reprint ed; 395. Chaukhambha Orientalia: Varanasi; 2005. [Google Scholar]
10. Dalhana, Commentator. Susrutha Samhita, Sharira Sthana 10/13-15, 68-70, reprint ed; pp. 388–95. Varanasi: Chaukhambha Orientalia; 2005. [Google Scholar]
11. Govind Das, Bhaishajya Ratnavali, Balarogachikitsa. In: 71/5-6. 19th ed. Brhmashankar Tripathi., editor. Varanasi: Chaukhambha Prakashan; 2009; 1073. [Google Scholar]
12. Gupta UC (Compiler). Vaidyaka Sabda Sindhu; p. 1050. 5th ed. Varanasi: Chaukhambha Orientalia, 2005. [Google Scholar]
13. Sharangadhara, Sharangdhara Samhita, Purva Khanda. In: 6/14-17. 5th ed. Murthy KR, editor. Varanasi: Chaukhambha Orientalia, 2003; 29. [Google Scholar]
14. Tarkavachaspati T. Compiler. Vachaspathyam. 3rd ed. III. New Delhi: Rashtriya Sanskrit Sansthan, 2006; 2105. [Google Scholar]
15. Vagbhata, Ashtanga Hridaya, Uttara Sthana, Balopcharniya Adhyaya. 1/9, 47-48. In: Hari Shastri Paradkar., editor. 9th ed. Varanasi: Chaukhambha Orientalia, 2002; 778–781. [Google Scholar]
16. Vagbhata, Ashtanga Samgraha, Uttara Tantra, Rasayanavidhi Adhyaya. In: 49/29-34. 1st ed. Shivprasad Sharma., editor. Varanasi: Chaukhambha Sanskrit Series Office, 2006; 914. [Google Scholar]