



# *Ayurveda* In Pediatric Oral Aesthetics: A Comprehensive Review on Natural Teeth Whitening

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## ABSTRACT

**Background:** Dental discoloration in children can significantly affect aesthetics and psychosocial confidence. Conventional whitening techniques may not be suitable for pediatric use due to enamel sensitivity and chemical exposure. *Ayurveda* offers natural alternatives that have been traditionally employed to improve oral hygiene and aesthetics.

**Objective:** To explore *Ayurvedic* approaches and remedies for teeth whitening in children, backed by classical references and modern research.

**Methods:** A narrative review of *Ayurvedic* classical texts (*Charaka Samhita*, *Sushruta Samhita*, *Kashyapa Samhita*) and modern scientific studies was conducted. Herbal practices such as *Dantamanjan* (herbal tooth powder), *Gandusha* (oil pulling), and decoction rinses were examined.

**Results:** *Ayurvedic* formulations like *Triphala*, *Haridra*, *Yashtimadhu*, *Lavanga*, and *Neem* are found to be effective in oral cleansing and preventing plaque. *Gandusha* with sesame or coconut oil helps reduce microbial load and discoloration. Scientific studies validate the antibacterial and whitening potential of these remedies.

**Conclusion:** *Ayurvedic* dental care offers gentle and natural whitening solutions for children, emphasizing preventive and holistic oral hygiene. Further pediatric trials are recommended to standardize these interventions.

**Keywords:** *Ayurveda*, teeth whitening, children, *Dantamanjan*, *Gandusha*, *Triphala*

## I. INTRODUCTION

Teeth discoloration in children is not only a cosmetic concern but also a potential indicator of poor oral hygiene or systemic health issues. The condition may result in psychosocial discomfort during formative years. Pediatric teeth whitening using conventional methods (bleaching agents like hydrogen peroxide) may lead to enamel erosion, tooth sensitivity, or soft tissue irritation.

In *Ayurveda*, oral hygiene is considered essential for overall health. Traditional remedies, especially herbal powders and oil-based techniques, are advocated for maintaining dental aesthetics. This article explores *Ayurvedic* approaches to pediatric teeth whitening based on textual evidence and current research.

## II. ETIOLOGY OF DENTAL DISCOLORATION IN CHILDREN

### 1. Extrinsic Stains:

- Ingestion of colored food and drinks (berries, cola, artificial dyes)
- Poor oral hygiene
- Bacterial plaque accumulation

### 2. Intrinsic Stains:

- Fluorosis
- Use of tetracycline during tooth development
- Enamel hypoplasia
- Trauma to developing tooth buds



Enamel hypoplasia

From an *Ayurvedic* viewpoint, *Dantamalinya* (dental discoloration) is often a result of improper diet, poor daily regimen (*Dinacharya*), and vitiation of *Kapha* and *Rakta Doshas* [1].

## III. AYURVEDIC PERSPECTIVE OF DENTAL HEALTH

According to *Ayurveda*: Teeth (*Danta*) are considered *Upadhatu of Asthi Dhatu* [2]. The oral cavity is dominated by *Kapha Dosh* [3]. Discoloration can be linked to “*Dantamalinya*,” an indication of impaired oral hygiene [1].

Classical texts like *Kashyapa Samhita* and *Ashtanga Hridaya* emphasize regular use of herbal powders and medicated oils to ensure dental health [1].

## IV. AYURVEDIC REMEDIES FOR DENTAL WHITENING IN CHILDREN

### 1. Herbal Tooth Powders (*Dantamanjan*)

- **Triphala:** Combines *Haritaki*, *Amalaki*, and *Bibhitaki*. Antioxidant, antimicrobial, plaque control [4].
- **Haridra (Turmeric):** Anti-inflammatory, reduces microbial load [5].
- **Yashtimadhu (Licorice):** Reduces bacterial adhesion [6].
- **Lavanga (Clove):** Antibacterial, pain relief [7].
- **Arimeda:** Used for strengthening gums and whitening [8].

### 2. Oil Pulling (*Gandusha/Kavala*)

- **Coconut oil:** Reduces *Streptococcus mutans*, helps in stain removal [9].

- **Sesame oil:** Traditionally used in *Gandusha* for strengthening teeth and gums [2].

### 3. Herbal Mouth Rinses

- **Khadira (Acacia catechu):** Astringent, anti-inflammatory [10].
- **Neem (Azadirachta indica):** Antibacterial and whitening effect [6].
- **Bakul (Mimusops elengi):** Used for oral cleansing [11].

### 4. Topical Application (Lepa)

For older children, *lepa* of *Triphala* and *Haridra* mixed with honey can be applied under supervision [12].



Oil Pulling

## V. SCIENTIFIC EVIDENCE SUPPORTING AYURVEDIC INGREDIENTS

- A randomized control trial showed that *Triphala* mouthwash significantly reduced plaque and gingivitis [4].
- *Haridra* and *Yashtimadhu* exhibited anti-inflammatory and antibacterial properties suitable for pediatric use [5], [6].
- Studies show oil pulling reduces halitosis, plaque, and bacteria like *Streptococcus mutans* [9].

## VI. PRECAUTIONS AND AGE-SPECIFIC CONSIDERATIONS

- Avoid overly abrasive ingredients in young children [3].
- Ensure herbal preparations are free of contaminants.
- Flavor can be enhanced with safe additives like cardamom or fennel [1].
- Regular brushing and diet management should accompany *Ayurvedic* measures.

## VII. COMPARISON WITH MODERN WHITENING AGENTS

- Chemical bleaching agents may cause enamel thinning, increased sensitivity [5].
- Herbal alternatives are safer, holistic, and offer additional benefits like gum strengthening [4].
- *Ayurvedic* measures work gradually but are sustainable [1].

## VIII. CONCLUSION

*Ayurvedic* remedies for pediatric teeth whitening are rooted in natural, safe, and time-tested practices. *Dantamanjan*, *Gandusha*, and herbal rinses promote not just cosmetic enhancement but also long-term oral hygiene. Integration with modern dentistry and clinical validation will further the acceptance and reliability of these protocols.

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