

PREPARATION AND EVALUATION OF HERBAL TOOTH POWDER

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Article Received on
23 June 2019,

Revised on 13 July 2019,
Accepted on 03 August 2019,

DOI: 10.20959/wjpr201910-15624

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ABSTRACT

Dentifrices are the product which is used to maintain the Oral Hygiene such as Freshness of mouth and to avoid tooth decay. The oral hygiene can be maintained throughout the day by using various dentifrices prepared by herbal and synthetic ingredients. This work was carried out to prepare Tooth powder which can be used as a tool for proper oral hygiene and to overcome the side effect of the conventional Tooth power prepared by synthetic ingredients. the Tooth Powder was prepared by using various herbal ingredients which possess the antibacterial, antiseptic and cooling properties. clove powder, Cinnamon Powder, Pepper Powder, Neem Powder, kala namak Khair Powder, Babul sal Powder, Arjuna Powder, Madhunashini, Liquorice,

Ritha, Triphala(Amala, Baheda, Hirda), Lodhara Powder, Vavding Powder, Pudina And Tulsi powder are the herbal ingredients were used in this work to formulate herbal tooth powder which can satisfy all the required properties to keep the mouth fresh and to prevent Tooth Decay caused by bacteria. The prepared Tooth Powder was evaluated for its organoleptic and physical characteristics such as color, odour, taste, stability, foamability and abrasiveness to ensure that it possess all the desired features to use against the dental disease. The result was found within the permitted limits.

KEYWORDS: Herbal Ingredients, synthetic ingredients, Oral hygiene.

1. INTRODUCTION

Dentifrices are the products which are used to maintain the oral hygiene such as freshness of mouth and to avoid tooth decay. The oral hygiene can be maintained throughout the day by

using various dentifrices prepared by herbal and synthetic ingredients. Synthetic formulation contains Toxic elements such as Sodium lauryl sulphate, fluoride, Propylene glycol and various artificial sweeteners. This formulation is natural and fluoride free. Fluoride is a toxic chemical when administered in body leads to generation of disease such as Neurological and endocrine dysfunctions. Mouth is the most absorbent place in the body. The toxic chemical will be absorbed by mouth and get into the body system easily, that is the reason some medicines are administered sublingually.

Tooth powder is a mildly powder that is used in combination with tooth brush to maintain oral hygiene. The manufacturing of tooth powder is a comparatively simple operation. The primary objective is the homogenous distribution of all the ingredients without contamination of foreign substances.

Types of Tooth Powder

- I. Whitening Tooth Powder-** The purpose is to freshen breath, help gums and reduce the amount of inflammation in the mouth. It is used to polish and whiten a person's teeth.
- II. Natural Tooth Powder-** ingredient like sea salt which act as an abrasive, natural chalk and certain essential oils like peppermint, eucalyptus used in the natural tooth powder.
- III. Herbal Tooth Powder-** sore or bleeding gums also can benefit from herbal tooth powder. Can have a variety of ingredients. Baking soda, powdered chalk, and white clay are common. Herbal tooth powder has been around for centuries and many believe it to be as essential part of any Teeth Cleaning regimen.
- IV. Homemade Tooth Powder-** these powders also can be made at home. Homemade herbal tooth powder can be beneficial because they may cost less and the person making it will know what ingredients he is putting in his mouth or in the mouth of his children.

Ideal properties

- Good abrasive effect ·
- Non irritant and non-toxic ·
- Impart no stain in tooth ·
- Keep the mouth fresh and clean ·
- Prolonged effect ·
- Cheap and easily available

1. Formulation of herbal dentifrice

Sr. No.	INGREDIENTS	QUNTITY TAKEN	ROLE OF INGREDIENTS
1	Clove Powder	2.0 gm	Dental Analgesic
2	Cinnamon Powder	1.0 gm	Analgesic
3	Pepper Powder	1.0 gm	To treat Mouth ulcer
4	Neem Powder	2.0 gm	Antiseptic
5	Kala Namak	3.0 gm	Cleaning of Teeth
6	Khair Powder	0.5 gm	Astringent
7	Babul Sal Powder	5.0 gm	Cleaning of Teeth
8	Arjuna Powder	3.0 gm	Cleaning of Teeth and Astringent
9	Madhunashini	1.5 gm	To remove stains of teeths.
10	Liquorice	2.0 gm	Ulcers
11	Ritha	1.5 gm	Foaming
12	Triphala (Amla, Baheda, Hirda)	2.0 gm	Astringent.
13	Lodhra Powder	2.0 gm	Anti-inflammatory
14	Vavding Powder	1.0 gm	Astringent
15	Pudina and Tulsi Powder	2.0 gm	Bactericidal

2. MATERIALS AND METHODS

Herbal tooth powder was prepared using clove powder, Cinnamon Powder, Pepper Powder, Neem Powder, kala namak Khiar Powder, Babul sal Powder, Arjuna Powder, Madhunashini, Liquorice, Ritha, Triphala(Amla, Baheda, Hirda), Lodhara Powder, Vavding Powder, Pudina And Tulsi powder. All this purchased from rural herbal supplier.

All the herbal ingredients were dried and grounded using domestic mixer. The required quantities of the ingredients were weighed and mixed according the ascending order of this weights. Mixed properly and stored in to the air tight containers.

4. Evaluation

Colour: The prepared tooth powder was evaluated for its colour. The colour was checked visually.

Odour: Odour was found by smelling the product.

Taste: Taste was checked manually by tasting the product.

Stability: The product was maintained in different temperature conditions to check its stability.

Spreadability: Spreadability was evaluated by spreading the powder manually.

Abrasiveness: It was evaluated manually.

Foamability: The foamability of the product was evaluated by taking small amount of preparation with water in a measuring cylinder initial volume was noted and then shaken for

10 times. Final volume of foam was noted.

3. Usage

Sufficient quantity should be applied with tooth brush and to be used twice daily early in the morning and before going to bed or as advised by the dentist for best result. It is useful against bacterial infections and to maintain freshness of mouth.

4. RESULTS AND DISCUSSION

Sr. No.	PARAMETER	Observation
01	Colour	Brown
02	Odour	Characteristics
03	Taste	Sweet And Bitter
04	Stabilty	Stable
05	Spreadability	Easily Spreadable
06	Abrasieness	Good Abrasive
07	Foamability	Good

5. CONCLUSION

The ingredients used in the present work, was screened and selected to possess antibacterial effect and to maintain oral hygiene as it can be claimed by its results as effective toothpaste. Any herbal toothpaste is considered safe to use twice a day and it does not cause any harmful effects, instead imparts good freshness and away from bad odour. Oral hygiene can be maintained in a reliable, safe and inexpensive way by using herbal tooth pastes.

8. ACKNOWLEDGEMENT

The authors are grateful to the management of Rajesh Bhaiyya Tope College of Pharmacy providing all the necessary facilities for the successful completion of the work.

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