

DEVELOPMENT AND SENSORY EVALUATION OF “AAMLIKAPHALAPANAK” (AN EXCELLENT APPETIZER)

Sana Abdullah Patel*, Prof. Dr. Abhijit Joshi and Asst. Prof. Supriya Joshi

Student of MSc. Nutrition and Food Science, Department of Ayurveda, Tilak Maharashtra Vidyapeeth, Mukund Nagar, Pune-37.

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*Corresponding Author

Sana Abdullah Patel
Student of MSc. Nutrition and
Food Science, Department of
Ayurveda, Tilak Maharashtra
Vidyapeeth, Mukund Nagar,
Pune-37.

ABSTRACT

Introduction- The recipe “AAMLKAPHALAPANAK” was selected from the Ayurvedic text as Bhojankutuhah with respect to its known benefits as it imparts the taste, confers strength and satiates the senses. The research was undertaken to carry out a pilot study for developing this product for the community. **Methodology-** The product was prepared by taking in consideration the amount of ingredients given in the Bhojankutuhah, then the product was further carry forward to sensory analysis. **Result-** The product has exhibited excellent overall acceptability with respect to its appetizing nature tangy flavour, sweet and sour taste. **Conclusion-** Finally it is concluded that the product has been accepted by the community and it would be really helpful for supportive benefits. The product can be carry forward for better detail analytical process.

KEYWORDS: Aamlikaphalapanak, tamarind, digestive appetizer constipation.

INTRODUCTION

Ayurveda is an ancient medical science which deals with to maintain healthy life style and treat the disease. Origin of Ayurveda starts from Lord Brahma, remembering Ayurveda, taught it to his son Prajapathi, he in turn taught it to Ashwini Kumaras (twins), they taught it to Sahasraksa (Lord Indra), after he taught it to Atri's son Punarvasu and other sages, they taught it to Agnivesa and others and they (Agnivesha and other disciples) composed treatises, each one separately. The *Bhojankutuhah* by *Sri Raghunatha Suri* is a rare and valuable work compiled from various ancient texts and other authentic sources.

AIMS AND OBJECTIVES

Aim- Development and Quality Evaluation of “*Aamlikaphalapanak*” (tamarind sharbat) with respect to its sensory analysis.

Objectives

To prepare a therapeutic food product by using functional ingredients as mentioned in the Ayurvedic literature.

- To conduct sensory analysis of therapeutic food product.
- To study the properties of ingredients used in the product as per Ayurveda and Modern Science.
- To conduct the product trials in order to ensure its community acceptability.

The title *Bhojankutuhah* is a compound word comprised of two Sanskrit words: *bhojan* and *kutuhala*. The term

bhojan has a number of english meanings such as food, eating food, feeding, using, enjoying and so on. The term **kutuhala** also has a number of english meanings such as wonderful, excellent, praised, celebrated, desire, curiosity and so on. In this research we are going to study the traditional method of developing the recipe with its properties as per modern and *Ayurvedic* aspect.

Aamlikaphalapanak is a recipe made from ripe tamarind. The drink is very delicious and soothing. Tamarind also known as “Indian date” is a sweet and sour fruit that is an integral part of the Indian cuisine and has many health benefits.

Tamarind is considered good for constipation due to its laxative property. It helps to boost immunity as it is rich in vitamin C and antioxidants, making it useful in managing common cold.

Tamarind powder might also help to manage blood sugar as well as insulin levels and is thus considered good for diabetic patients. It might also be beneficial for people trying to manage weight as it helps decrease food cravings thereby preventing overeating.

Also, eating Tamarind pulp helps to eliminate worms from the stomach due to its anthelmintic property.

Tamarind Sharbat in India renowned for its appetising properties. It is made from ripe tamarind and is brown in colour and is consumed as a tasty and healthy beverage to fight against many health conditions. It is an chilled beverage mainly found in Indian subcontinent.

This drink is mostly consumed in Northern India and considered to be most beneficial in treating Gastrointestinal Disorders. In Indian science it is regarded as a tonic believed to decrease constipation due to its laxative property. It helps to boost immunity as it is rich in vitamin C and antioxidants, making it useful in managing common cold.

Tamarind powder might also help to manage blood sugar as well as insulin levels and is thus considered good for diabetic patients. It might also be beneficial for people trying to manage weight as it helps decrease food cravings thereby preventing overeating. The reason behind selecting this recipe is nowadays, the use of medicinal plants and bioactive phyto-compounds has seen more growing interest. Fruit and vegetables are rich sources of many different bioactive phyto-compounds, including phenolic components, carotenoids, vitamin E, and vitamin C, which exhibit good antioxidant properties and are, therefore, regarded as an unquestionable component that should be present in everyone's diet.

According to Ayurveda in *Bhojankutuhala* the term *Panaka* is defined- It is an appetizer which is beneficial in various treatments, like urine infection, piles, diabetes, for cooling, soothing and strengthening effects. It imparts taste, maintain the doshas, stimulates digestive fire, improves digestion, etc. "*panak*" was first developed and invented by the "*Bhimsena*" in *Mahabharata* who was one of the "*Pandavas*". It was prepared to please the Lord Krishna. *Acharya Raghunath Suri* states the properties of this recipe that are as follows- it confers strength, instantly imparts taste and quickly satiates the senses. Appetizer is a drink taken before a meal, to provide energy in summer season due to excessive sweating and to stimulate one's appetite.

This research contains the preparation and evaluation of *Aamlikaphala panak*. The recipe is made by referring to the ingredients and procedure mentioned in *Bhojankutuhala*. The data is collected by testing the sample of the recipe by analyzers, sensory analysis is also done.

MATERIALS AND METHODS

1. Materials

- **Procurement**- The product is made according to the ingredients and procedure as mentioned in the *Ayurvedic Literature* as *Bhojankutuhala*. All the raw materials required for the preparation of "*Aamlikaphalapanak*" are selected of Good Quality and these raw materials are procured from local stock market. The materials are listed below-
 - ripe tamarind (*Aamlikahala*)- 1 medium sized
 - Candied Sugar (*Sita Sharkara*)- 1 tbsp
 - Black pepper (*Maricha*)- 1/8th Tsp
 - Edible Camphor (*Karpoora*)- 1/8th Tsp
 - Cold Water (*Sita Jala*)- 200 ml
 - Clove powder - 1/8th Tsp

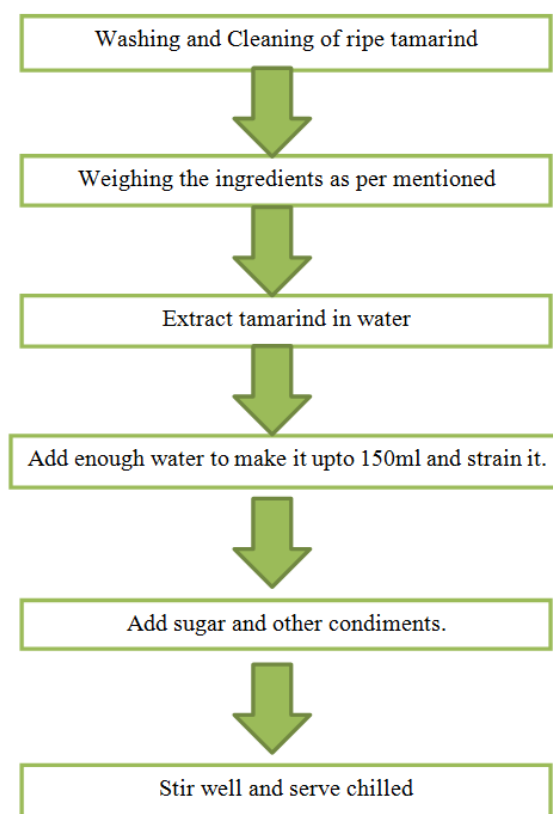
2. Methodology (Actual Execution of the Project)-

Preparation of the product as per the reference given in the *Bhojankutuhala* is as follows-

अम्लिकाया फरं पक्वं मर्दितं वारिणा दृढम्।
शर्करामरिचोन्मिश्रं लवङ्गेनदुसुवाप्तितम्॥

The above *shloka* states that the ripe tamarind fruit squeezed tightly in the water. Sugar and pepper is added and the mixture is imparted fragrance by adding cloves and camphor. This product as excellent appetising drink and the properties are it imparts taste, confers strength and quickly satiates the senses.

As per the reference given the product was prepared and while preparing the product ripe tamarind is washed thoroughly and weighed. Mashed the tamarind pulp with the help of bare hands and squeeze it finely in water for the uniform semi-solid consistency then add 1 tablespoon of Candied Sugar powder for sweetness and other condiments as 1/8th teaspoon of Black pepper powder which will impart slightly pungent taste + 1/8th teaspoon of Edible Camphor and clove powder to impart fragrance and add 200 ml of Cold Water to mitigate thirst, mix all the ingredients well to have uniform homogenous mixture and serve chilled. Further the quality of therapeutic food product will be evaluated through sensory analysis. The flow chart of the process is as follows-



OBSERVATION

Observation is carried out by the sensory evaluation of the product. Sensory evaluation is carried out by the 5

sensory panelist in which each one has its own observation and remarks about the product. So, the product is scored for its characteristics like appearance, aroma, taste and overall acceptability, on five points Hedonic scale.

- Like a Lot - 5
- Like a little - 4
- Neither like or Dislike - 3
- Dislike a little - 2
- Dislike a Lot- 1

SAMPLE HEDONI SCORE CARD

Tray No -

Name of the Product-

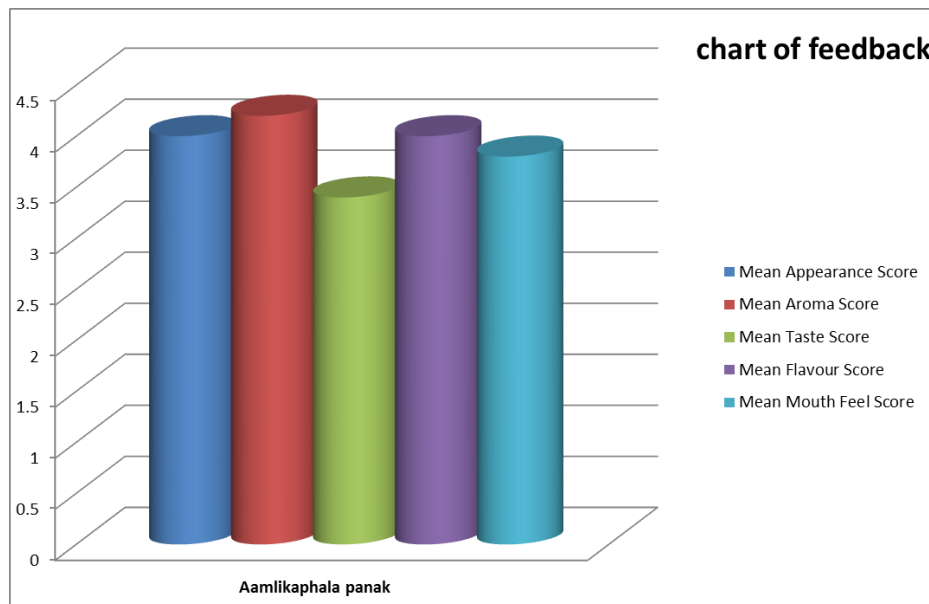
Name of the Panellist-

In front of you is one sample. Taste the given sample and put a “Tick mark” on how much you like or dislike each of the characteristics. You can taste the sample more than once.

Sensory attributes					
Scores	Appearance	Aroma	Taste	Flavour	Texture/Mouthfeel
LIKE A LOT					
LIKE A LITTLE					
NEITHER LIKE NOR DISLIKE					
DISLIKE A LITTLE					
DISLIKE A LOT					

Mean Score of Aamlkaphalapanak

Sr.no	Appearance	Aroma	Taste	Flavour	Mouth feel
1.	4	5	5	5	5
2.	4	4	3	3	4
3.	4	4	2	4	2
4.	4	4	4	4	4
5.	4	4	3	4	4
Total	20	21	17	20	19
Mean	4	4.2	3.4	4	3.8



DISCUSSION

Preparation of the product is carried out as per the reference given in the Ayurvedic literature as *Bhojankutuhala*. The only study of *Bhojankutuhala* was carried out to understand the method of preparation of the ‘AAMLKAPHALAPANAK’ and further the product was analysed by the sensory evaluation. The sensory evaluation is carried out by 5 semi trained panelists on Five point Hedonic Scale. Ingredients used in the product

are of good quality and are procured from the local stock market. It was observed that the recipe is not time consuming and was easy to prepare. About 1 hour is required to prepare the product.

During the analysis I observed that the aroma and flavour of the product ranked 4 (Like a little) due to the addition of Camphor and Black pepper. Panelists liked the product very much as an excellent appetising drink and a

therapeutic medicine. They suggested some tips that can be very helpful for us to improve the quality of the product.

As taking in consideration the tips given by the panelists we will definitely try to improve the quality of the product and in future we hope that the product will rate excellent for its taste, aroma and can be acceptable by overall community.

In further future the product can be analysed by conducting its shelf-life testing, microbial analysis, proximate analysis and chemical analysis.

RESULTS

- 1. Result of Product Development-** The product development was carried out as per the resources, materials, references found in the *Bhojankutuhul*. All ingredients used in the preparation of this product are of good quality and purchased from local stock market. The product was prepared as per the reference and the end product was exhibited slight yellow colour and has uniform consistency with sweet and sour taste, slightly pungent flavour and pleasant aroma. Final product was served chilled as per mentioned in the procedure and exhibited good physical appearance.
- 2. Result of Sensory Evaluation-** Sensory evaluation was conducted by 5 semi trained panelists to evaluate the colour, taste, aroma, sweetness, texture of the given product on Five point Hedonic Scale. Among sensory analysis the product ranked excellent for its Aroma and Appearance. The product "AAMLIKAPHALAPANAK" exhibited a fair result with respect to its taste, flavour and texture as per the reference. Then the colour of the product was ranked fairer and exhibited an excellent mouth feel. Overall acceptability is ranked 5 (like a lot). At last the product exhibited good overall acceptability with respect to sensory analysis.

CONCLUSION

The product was successfully prepared as per mentioned in the *Ayurvedic* literature. The product exhibited excellent overall acceptability with respect to its appetizing nature, flavour, sweet and sour taste. and has pleasant aroma. The product will definitely provide its therapeutic benefit as specified in the *Bhojankutuhul*.

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