

## DEVELOPMENT AND SENSORY EVALUATION OF “PAKVA AMRAPHALAPANAKA” (MANGO FRUIT DRINK)”: RESEARCH ARTICLE

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### ABSTRACT

The recipe “PAKVA AMRAPHALA PANAKA” was selected from the Ayurvedic text as “*Shemkutuhhal*” with respect to its known benefits as it imparts the taste, confirms strength and satiates the senses. The research was undertaken to carry out a pilot study for developing this product for the community. The product was prepared by taking in consideration the amount of ingredients given in the “*Shemkutuhhal*”, then the product was further carried forward to sensory analysis. Panaka- the appetizers are beneficial in various treatments, like urine infection, piles, diabetes, for cooling, soothing and strengthening effects. It imparts taste, maintain the doshas, increases digestive fire, improves digestion, etc. Finally, it is concluded that the product has been accepted by the community and it would be really helpful for health benefits. The product can be carried forward for better detail analytical procedure.

**KEYWORDS:** Pakva Amraphala Panak, Mango Fruit Drink.

### INTRODUCTION

Food is the most essential to sustain a good life and the same food if consumed inappropriately becomes the root cause of many diseases. So proper knowledge of food and its importance should be known to all human beings to have better benefits from it.

Traditional Indian foods have been prepared for many years and preparation varies across the country. Traditional wisdom about processing of food, its preservation techniques, and their therapeutic effects have been established for many generations in India. Ayurveda is a traditional system of medicines native to India. It clearly emphasises the relationship between the food you take and the state of the body and mind.

Panaka is defined as- 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 equilibrium state of Doshas, stimulates digestive fire, improves digestion, etc. (*Raghunath Suri, Bhojankutuhhal*).<sup>[1]</sup>

“PAKVA AMRAPHALA PANAKA” is prepared from fully ripened mangoes as mango is seasonal fruit its drink in off-season not possible, so such techniques will be helpful to be available in off-season.

### MATERIALS AND METHODS

**Raw materials procurement-** The product is made according to the ingredients and procedure as mentioned in the Ayurvedic Literature as *Shemkutuhhal*. (*Sharma. S, Shemkutuhhal*).<sup>[2]</sup> All the raw materials required for the

preparation of “Pakva Amraphala Panak” are selected of Good Quality and these raw materials are procured from Pune local stock market.

#### The materials are listed below-

Ripened Medium Sized Mango – 1 Nos, Candied Sugar (Sita Sharkara)- 1 tbsp, Cardamom powder- 1/4th Tsp, Clove powder- 1/4th Tsp, Dry ginger powder- 1/4<sup>th</sup> Tsp.

**Methodology-** The product was prepared as per the reference given in the Ayurvedic Text *Shemkutuhhal*. A fully ripe mango taken which was softened by hand where juice is squeezed out in a clean vessel, then sugar added in it. Afterwards cardamom powder added, then clove powder added, then dry ginger powder added & stirred well. Further the quality of product was evaluated by sensory analysis.

#### Sensory Analysis of the Product

The product was ranked as ‘Like a little’ for its Aroma, Appearance, Taste & Mouthfeel.

And ‘Neither like nor dislike’ for Sweetness. Sensory evaluation was carried out by the 5 semi-trained panelists 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. (Please refer table no.1)

### RESULTS AND DISCUSSION

**Result of Product Development-** The product development was carried out as per the resources,

materials, references found in the Shemkutuhah. The product was prepared as per the reference and the end product was exhibited of yellow colour and has uniform consistency with slight sweet taste. Final product was served chilled as per mentioned in the procedure and exhibited good physical appearance.

**Result of Sensory Evaluation-** Sensory evaluation was conducted by 5 semitrained panelists to evaluate the colour, taste, aroma, sweetness, texture of the given product on Five-point Hedonic Scale. Panelists liked the product very much as an excellent refreshing drink and a therapeutic drink. They suggested some tips that can be very helpful for us to improve the quality of the product.

The given table was used for sensory evaluation. (Singh D, Ackbarli).<sup>[3]</sup>

Sensory attributes					
Scores	Appearance	Aroma	Taste	Sweetness	Mouthfeel
LIKE A LOT					
Like a Little					
Neither like nor dislike					
Dislike A Little					
Dislike A Lot					

**DISCUSSION**

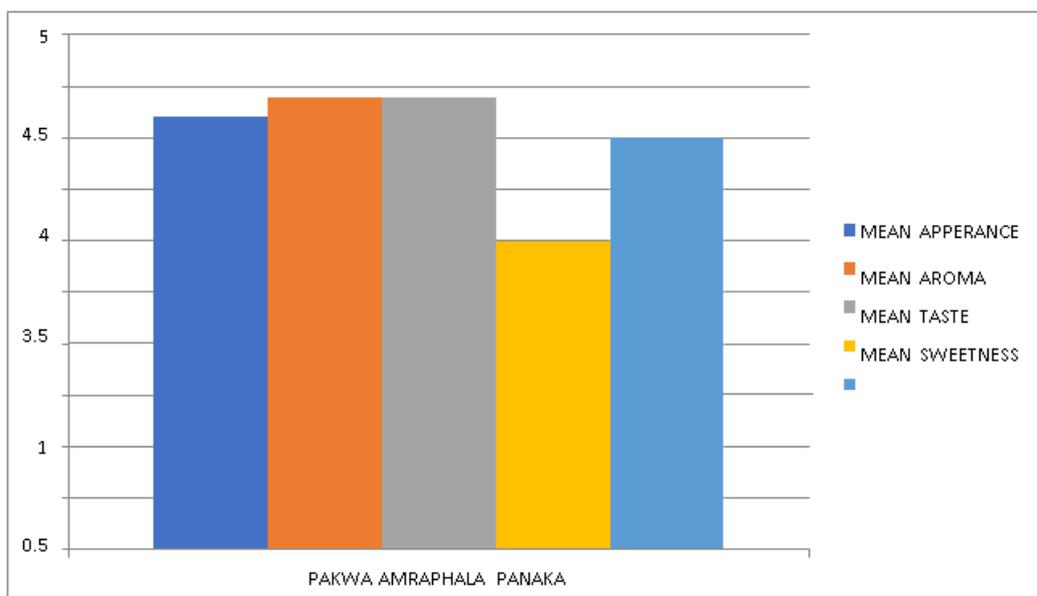
During the process I understood how fruits play an important role in human’s life by providing so many useful health benefits. Recipe was not at all time consuming as it took only 45 minutes & one thing which can be studied was that mangoes are available in specific season so its proper utilization & shelf-life improvement

is very necessary. As only limited amount of fruits & vegetables are processed in India, some consumed in season but still wastage is in high amount which should be minimized.

The following table and graph show the mean score of the product-

**Mean Score of Pakva AmraPhala Panaka.**

SR. NO.	APPERANCE	AROMA	TASTE	SWEETNESS	MOUTHFEEL
1	4	4	5	3	4
2	5	4	4	3	4
3	4	5	4	3	4
4	4	4	5	3	4
5	4	5	4	3	4
<b>TOTAL</b>	21	22	22	15	20
<b>MEAN</b>	4.2	4.4	4.4	3.0	4.0



Graph Representation

## CONCLUSION

The product was successfully prepared as per mentioned in the Ayurvedic literature. The product was ranked as 'Like a little' for its Aroma, Appearance, Taste & Mouthfeel. And 'Neither like nor dislike' for Sweetness. The product will definitely provide its therapeutic benefit as specified in the Shemkutuhala.



**Figure- Pakva AmraPhala Panaka.**

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