

DEVELOPMENT AND SENSORY EVALUATION OF “HAMSINĪ (A NUTRITIOUS COOL DRINK)”

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ABSTRACT

The paper presents the study undertaken to develop and standardize a wholesome and an ancient traditional Indian recipe, a cool drink (“HAMSINĪ”). The drink was standardized as per the reference found in the ancient Ayurvedic literature (Ksemkutuhalam) with slight changes as per practical application. The primary objective of this study was to develop quality assess(sensory analysis) the food product, It was made using thick water free cow’s milk, cow’s curd and sugar, cardamom, black pepper were added to it with an intention to develop an innovative and nutritive food product. Finally, sensory analysis of the product was carried out by panel of 5 semi trained judges on 5 points hedonic scale. The product exhibited an excellent acceptability for its aroma, taste and mouth feel and physical appearance exhibited to be fair. Thus it has shown an overall acceptability & can be used as an excellent cool beverage and aids better digestion. It can be recommended to all age group, growing children, adolescents and old age people with digestive problems, burning sensation, to increase appetite and reduce vatta pitta.

This product can be undertaken for further proximate and microbial analysis in future.

KEYWORDS: Hamsini, Cows Milk, Cows Curd, Cardamom, Blackpepper.

INTRODUCTION

Definition of Ayurveda

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. Food systems can deliver numerous biological functions through dietary components in the human body. Indian traditional foods are also recognized as functional foods because of the presence of functional components such as body-healing chemicals, antioxidants, dietary fibres, and probiotics. These functional molecules help in weight management, and blood sugar level balance and support immunity of the body.

(Samadoṣa samāgni ca sama dhātu malakriyah

Prasanna ātma indriya manah svastha iti abhidhīyate)

One who is established in Self, who has balanced dosas (primary life force), balanced agni (fire of digestion), properly formed dhatus (tissues), proper elimination of malas (waste products), well-functioning bodily processes, and whose mind, soul and senses are full of bliss is called a healthy person -Sushrut Samhita 15/48.

When somethings disrupts this balance, you get sick among the things that can upset this balance are genetic or birth defects, injuries, climate and seasonal changes, age and your emotions. those who practice Ayurveda

believe every person is made of five basic elements found in the universe: space, air, fire, water and earth.

These combine in the human body to form three life or energies, called doshas, they control how your body works they are vatta dosha (space and air);pitta dosha (fire and water); and kapha dosha (water and earth).

Everyone inherits a unique mix of the three doshas, but one is usually stronger than the others. Each one controls a different body function. Its believed that your changes of getting sick and the health issues you develop are linked to the balance of your doshas.

The Research paper aims to highlight the preparation and sensory evaluation of “HAMSINĪ”. This recipe was made by referring to the literature obtained from the book ‘ksemakutuhalam Composed by ksemasarma.

“HAMSINĪ” is highly nutritious and wholesome cool drink made of using ingredients such as cows milk, cows curd, sugar, cardamom, black pepper.

Cow milk is extremely nutritious and has an array of nutrients, which makes it a whole meal in itself. It is the storehouse of quality protein that helps in giving ample strength to the building block of cells. Milk is considered as ‘whole food’ It contains protein, carbohydrates, fat, important vitamins, minerals such as calcium,

magnesium, phosphorus, potassium, sodium, etc. and is considered essential for sustaining life and maintaining health. These nutrients in milk almost make it nature's most nearly perfect food. According to Ayurveda, Cow's milk is the most 'Sattvik' foods. It is conducive for all the beings, enlivening, strengthening, growth promoting, anti-aging and a rasayana. It helps in increasing the Ojas.^[4]

Cow Curd (dahi) prepared from indigenous cow is milk is considered as digestive, nutritive and useful in gastrointestinal ailments by checking or controlling the growth of harmful organism. It is rich source of minerals, vitamins, and protein, such as vitamin D, niacin, vitamin A, vitamin B12, riboflavin and potassium, calcium, phosphorus.^[9] Cow's milk is lower in fat.

Curd derived from cow's milk is very cooling, stimulates digestive fire, promotes strength and alleviates vatta, it is sweet in taste, dry pleasant texture.

Curd derived from cows milk is recommended in the following conditions viz loss of taste, chronic rhinitis, painful micturition, fever with chills, Intermittent fever, haemorrhoids and grahni.

Sugar is an excellent source of energy, a basic sucrose from a carbohydrate. It is heavy to digest, aggravates kapha, is direptic, stimulates the digestive fire.

Cardamom is bitter and hot in potency pungent in taste, and light to digest, alleviates vatta and kapha and is useful in the treatment of dyspnoea, body ache, heartburn, painful urination and toxicity, it removes bad taste from the mouth, is aphrodisiac, cardinal and unfavourable to the continuation of pregnancy, stimulates the digestive fire promotes digestion of food improves intellect and treats wounds, haemorrhoids, itching and cough.

Black pepper is high in antioxidants, high anti-inflammatory properties, improve brain function, may improve blood sugar control, may lower cholesterol levels, may have cancer-fighting properties.

SENSORY EVALUATION

The sensory analysis data of HAMSINI was as follows -

Table 1: Individual scores of panellists on hedonic scale.

Sr no	Appearance	Aroma	Taste	Texture /mouth feel	Overall acceptability
01	3	5	5	4	5
02	4	4	5	4	4
03	4	4	4	3	4
04	3	3	3	4	4
05	3	4	4	4	4

The mean of the 5 characteristics was as follows -

Table 2: Mean score of panellists on hedonic scale.

Sr no	Characteristic	Mean score
01	Mean appearance score	3.4
02	Mean aroma score	4
03	Mean taste score	4.6

Boosts absorption of nutrients-black pepper may increase the absorption of essential nutrients like calcium and selenium, promote gut health may offer pain relief, reduce appetite.

Black pepper and its active compound piperine may have potent antioxidant and anti-inflammatory properties.

MATERIALS AND METHODS

Raw materials procurement

Functional raw materials like Cows milk, cows milk curd, sugar, cardamom, black pepper were procured from local supermarket of Pune.

Experimental trails & HAMSINI Preparation

The recipe HAMSINI was made according to the ingredients and procedure mentioned in kshemkutuhalam with some modification formula.

It was prepared as per traditional method of HAMSINI preparation.

Thick water free cows milk is mixed well with cows milk curd, then the mixture was strained using muslin cloth, to the strained mixture sugar, crushed cardamom and pinch of crushed black pepper is added and mixed well together giving us the final product HAMSINI.

SENSORY ANALYSIS OF THE PRODUCT

The product was scored for characteristics like appearance, aroma, taste, texture/mouth feel and overall acceptability, by panel of five people on five points hedonic scale using score-card. (please refer table-1)

Development of HAMSINI

The raw material used for one serve were as follows -

Cows milk – 180 ml
Cows curd – 240 ml
Sugar- 2 tsp
Cardamom –1 pinch
Black pepper – 1 pinch

04	Mean mouth feel/texture score	3.8
05	Mean overall acceptability score	4.2

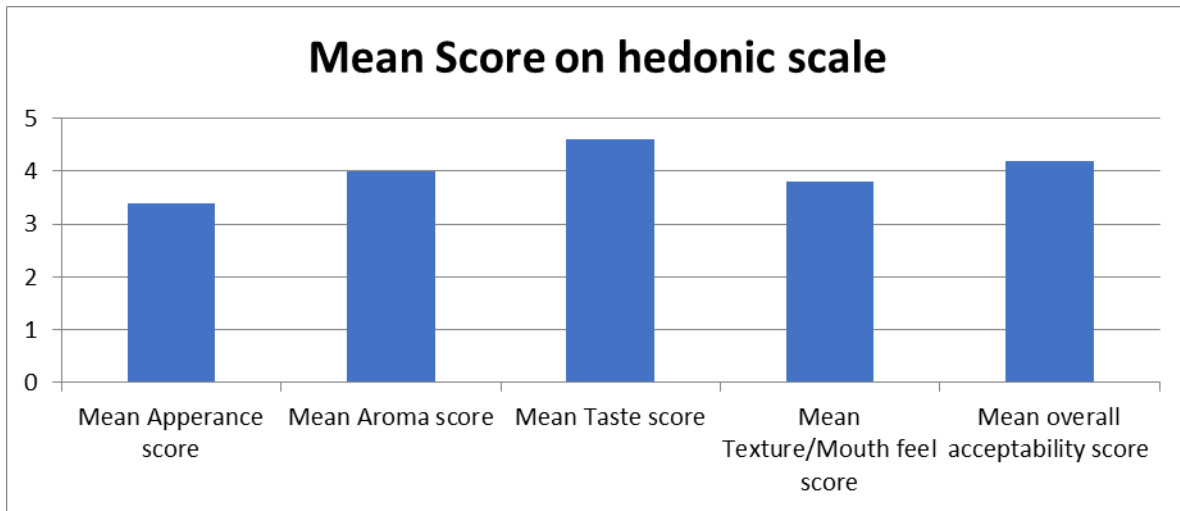


Figure 1: Sensory evaluation of "HAMSINI".

Among sensory analysis, the product ranked excellent with characteristics like aroma, taste and overall acceptability. The physical appearance and mouth feel were exhibited to be fair.

Thus, the product exhibited overall good acceptability with respect to sensory analysis. As the TR ingredients used in this product are available throughout the year, it can be prepared anytime when one wants too. One can especially enjoy having it during the summer season, this product has numerous therapeutic benefits and thus can have a global acceptance.



Figure 2- HAMSINI (A Nutritious Cool drink).

CONCLUSION

A wholesome and nutritious HAMSINI a cool beverage/drink with therapeutic properties successfully developed as per the reference found in ancient ayurvedic literature (ksemkutuhalam).

- The product exhibited an excellent overall acceptability.

- Hamsini can be considered as excellent appetizer, enhancing digestive fire, reducing vatta pitta, strength, promoting, nourishing, subsidies thirst, recommended to children, adolescent, old age.
- It is excellent source of protein, essential fats, calcium supports healthy bones and growth for both children and old age people.
- Incorporation of this recipe into the routine diet may significantly enhance the quality of diet, for better digestive system and nutritional status of individual There is scope in the future to conduct proximate as & microbial analysis as well as to study the shelf life of the product.

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