

DEVELOPMENT AND SENSORY EVALUATION OF RASALA(SHIKHIRINI)

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ABSTRACT

The study was undertaken to develop and standardize a wholesome and an ancient traditional ndian recipe, a sweet preparation “rasala (shikhirini)” that was made using buffalo’s curd, sugar, cardamom, cloves, camphor, black pepper with an intention to develop an innovative and nutritive food product that can be used as an extreme nourishing dessert and an acidity pacifier. The rasala (shikhirini) was standardized as per the reference found in the ancient ayurvedic literature (ksemakutuhalam) with slight changes as per practical application. Sensory analysis of the product was carried out by a panel of 5 semi-trained judges on 5 points hedonic scale. The product exhibited an excellent acceptability for its aroma, taste and overall acceptability. It can be undertaken for further proximate and microbial analysis. The product exhibited an excellent acceptability for its aroma, taste and overall acceptability. Mouth feel and physical appearance were exhibited to be fair. Thus, it has shown an excellent overall acceptability and therefore can be used as an extreme nourishing dessert and a growth promotor. It can be recommended especially to growing children, adolescents, pregnant women and nursing mothers, people with emaciating disorders, leanness, malnutrition and to athletes. The product can be undertaken for further proximate and microbial analysis in future.

KEYWORDS: Rasala (shikhirini), Buffaloes curd, sugar, cardamom powder, cloves

INTRODUCTION

• Definition of Ayurveda

The traditional Hindu system of system of medicine that uses a combination of diet,herbal treatment, and yogic breathing to treat illnesses. Ayurvedic medicine (“Ayurveda” for short) in one of the world’s oldest holistic (“whole body”) healing systems. It was developed more than 3,000 years ago in India. It’s based on the belief that health and wellness depend on a delicate balance between the mind, body and spirit. Its main goal is to promote good health, not fight disease. But treatments may be geared toward specific health problems. If your mind, body and spirit are in harmony with the universe, you have good health.

When somethings disrupt 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 vata 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. It’s believed that your changes of getting sick and the health issues you develop are linked to the balance of your doshas.

• AIMS AND OBJECTIVES OF AYURVEDA

The purpose of Ayurveda

The purpose of Ayurveda is to protect the health of the healthy and to alleviate disorders of the diseased. So, in simple terms, Ayurveda has two different aspects to it:

- 1) The preventive aspect and
- 2) The curative aspect. The preventive aspect deals with methods, recommendations and ways of life, which if adopted and followed religiously from the beginning, can boost the strength and resistance of human beings physically, mentally and emotionally in such a way that they can protect themselves from diseases.

The curative aspect deals with providing relief to the diseased. Ayurveda recommends the use of several herbs, massages and therapies etc. And even recommends subtle alterations to dietary habits and lifestyle, for an affected individual to get back his/her state of good health.

Ayurveda also deals with the mental and spiritual aspects of life. It explains the difference between good and bad life. It explains the difference between good thoughts, behaviour and actions (the promoters of health) and those which are inappropriate (the non-promoters of health like anger, jealousy, greed, lust etc.)

Ayurveda gives priority to maintain the healthy state of a normal human being. Atur means patient. Vikar means disease. Prashaman means to cure. Second aim is to treat the disease of patient (curative aspect). The above sequence is also important. Ayurveda has given more emphasis for preventive aspect. Ayurveda is said as internally continuing because of its beginning-lessness, because the characters of entities are determined by universal nature and because the characters of all substances are eternal. There was never non-existence of the flow of life or intellect.

Kshemkutuhalam by ksemasarma is a curious work on ayurvedic dietetics. Though named after its author, the title could also be explained as a compound of the two Sanskrit words, 'ksema' and 'kutuhalam', meaning, respectively, 'well-being' and 'curiosity'. The work is therefore a curious enquiry in to the nature of well-being, both physical and mental and in this sense, has its basic in Ayurveda.

Ksemasarma, in the manner of any modern author on the art of cooking, describes, often in graphic detail, various mouth-watering dishes, never once failing to add a note on their ayurvedic properties. And as he delineates, in chaste Sanskrit, the preparation of savouries, the muse of poetry lends him an occasional helping hand and lo! The reader is exposed to a pleasant blend of rasas, both of the tongue and the heart.

Nutrition is the science of foods, the nutrients and other substances therein, their action, interaction and balance in relationship to health and disease; the processes by which the organism ingests, digests, absorbs, transports and utilises nutrients and disposes the end products. In addition, nutrition is concerned with social, economic, cultural and psychological implications of food and eating. In short, nutrition science is the area of knowledge regarding the role of food in maintenance of health.

The traditional and modern science do have the same aims and objectives that is maintaining a healthy life style and to prevent and treat the diseases. The definition of health according to Ayurveda "the person is called as healthy (swastha), if he has balanced or equilibrium condition of dosha" (bio-energies), dhatu (body tissues), mala (waste products), agni (digestive fire) and happy and balanced state of soul, sense organs and mind. And according to modern science, WHO defines health as A state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity. The health doctors, nutritionist, dieticians, ayurvedic doctors,

and the public have all started to learn, accept and apply the traditional and modern science in their life. Be it by getting and blending the knowledge of ingredients and recipes, dincharya, ritucharya, biological clock, physical, emotional, mental, spiritual and social health. The presence of nutrients, gunas, rasa and benefits of having the ingredients are food items is also seen. There are a lot of similarities in both the sciences with some differences as well, but the aims and objectives of both remain the same.

We also had been recorded for the presentation of various recipes prepared in a systematic manner as mentioned by ancient Indian text for popularizing their nutritional and therapeutic importance. The research contains the preparation of evaluation of rasala (shikhirini). The recipes were made by referring to the ingredients and procedure mentioned in *kshemkutuhalam*. The data is collected by testing the sample of the recipe by analysers, sensory analysis is also done. Bhima, fond of eating, first prepared this dish and called it rasala (shikhirini). Krishna joyfully relished it again and again. Excepting spring, one that savors this drink at any other season becomes endowed with strength, bodily growth and quickness of senses.

Rasala (shikhirini) alleviates vata, increase semen, imparts strength, improves appetite, stimulates the digestive fire, promotes appetite, promote growth, is unctuous, sweet, cold and laxative and treats bleeding tendencies, thirst, burning sensation and catarrh.

1. MATERIAL AND METHOD

The recipe were made according to the ingredients and procedure mentioned in *kshemkutuhalam*.

List of recipe is as follows

Raw materials procurement-functional raw material like buffalo's curd, sugar, cardamom powder, black pepper powder, cloves powder, camphor were procured from local supermarket of Pune.

The raw materials used for one serve were as follows

- Buffalo's curd – 500gm
- Sugar -125gm
- Cardamom powder -5gm
- Pepper -5gm
- Cloves -5gm
- Camphor-1 pinch

METHOD

One should first take a 500 gms of curd freed of watery content, is obtained from buffalo milk and sour taste. To that 125 gms of pure sugar are added and the mixture is strained through a cloth slowly. It is then kept in an earthen vessel after adding cardamom, cloves, camphor and black pepper.

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)

RESULTS AND DISCUSSION

The ‘Rasala (Shikhirini)’ was scored for characteristics

like appearance, aroma, taste, texture, mouth feel and overall acceptability, by panel of five people on five point’s hedonic scale. score of each characteristic had gone through sensory analysis based on hedonic scale.

- Like very much – 5
- Like a little – 4
- Not sure – 3
- Dislike a little -2
- Dislike very much – 1

The sensory evaluation data of rasala (shikhirini) is as follows:-

Table no.1: individual scores of panellists on hedonic scale.

Sr.no.	Appearance	aroma	taste	Texture/mouthfeel	Over acceptability
1	3	5	5	4	5
2	4	4	5	4	4
3	4	4	4	3	4
4	3	3	3	4	4
5	3	4	4	4	4

The main of the 5 characteristics is as follows-

Table no.2: Mean score of panelists on hedonic scale.

Sr.no.	Characteristic	Mean score
1	Mean appearance score	3.4
2	Mean aroma score	4
3	Mean taste score	4.6
4	Mean mouth feel/texture score	3.8
5	Mean overall acceptability score	4.2

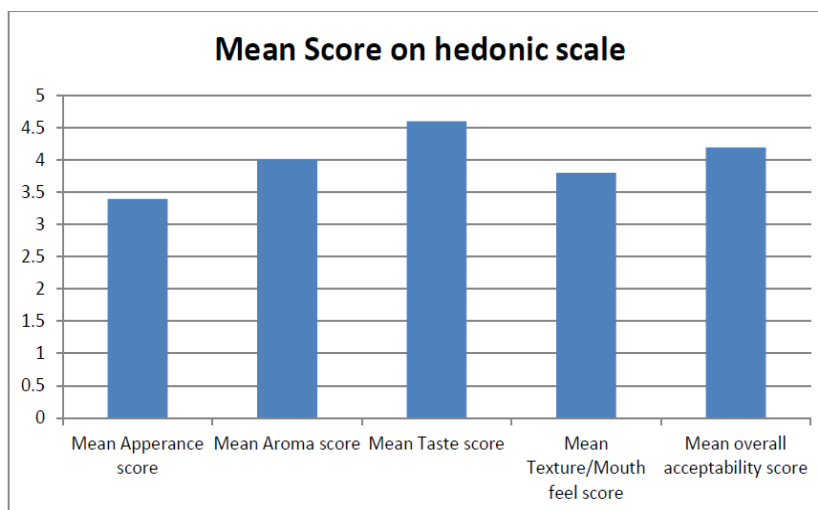


Figure 1: sensory Evaluation of ‘Rasala (shikhirini)’.

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

This product has numerous therapeutic benefits and thus can have a global acceptance.

Thus, the product exhibited overall good acceptability with respect to sensory analysis. As the ingredients used in this product are available through-out the year it can be enjoyed anytime when one wishes to have it. One can especially enjoy having it during the winter season.



Figure 2: Rasala (shikhirini).

CONCLUSION

- A wholesome and nutritious rasala (shikhirini) sweet dish with therapeutic properties successfully developed as per the reference found in ancient ayurvedic literature (ksemakutuhalam).
- The product exhibited an excellent overall acceptability.
- Rasala (shikhirini) can be considered to be a calorie dense and an alleviates vata, imparts strength, promotes growth food product and can be recommended to children, adolescents, pregnant and nursing mothers, people with bleeding tendencies, thirst, burning sensation, catarrh, malnutrition and to athletes.
- Incorporation of this recipe into the routine diet may significantly enhance the quality of diet and nutritional status of individuals.

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