

CRITICAL ANALYSIS OF SOME FOLKLORE FOOD HABITS OF MOODUBIDRI RANGE

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ABSTRACT:

The traditional or folklore food habits have played major role in the healthy life of ancient Indian society. People were aware that, the healthy food makes to lead healthy and long life. In Ayurveda, Acharya Vagbhta says that “the food and medicine which are available in and around the locality of the person who lives since many years are most wholesome to their body”. These indigenous food habits are not only important as there are varieties but also for their healthy life. People in the name of culture and tradition, transformed the importance of indigenous foods generations to generation. In recent years, because of modernization, drastic changes in the life style are being observed in urban areas. The young generation looks down towards this food culture without realizing its importance. The Moodubidri Talluk of Dakshina Kannada District, Karnataka State is one such area having ethnic diversity in culture, food, life style etc. Hence a survey was conducted in Moodubidri range of Dakshina Kannada District and documentation of folklore food habits was done. Few popular preparations, namely tambli prepared out of tender leaves of Daddala/Kumbhika (*Careya arborea* Roxb.) and Manni (Porridge) prepared out of Koove/Tavaksheera/Arrowroot (*Maranta arundinacea* L.) are selected, subjected to analytical and nutritional studies. The results have shown the good medicinal value and high nutritive value which depicts the importance of traditional food.

Keywords: Folklore food, Moodubidri, Analytical study, Nutritional study.

1. INTRODUCTION:

India has rich diversities in religion, cultural, tradition as well as food system. Different places in different states have varieties of food culture. These indigenous food habits are not only important as there are varieties but due to their health importance. People in the name of culture and tradition transformed the importance of indigenous foods generations to generation. In recent years, because of modernization, drastic changes are being observed in urban areas. The young generation looks down towards this food culture without realizing its importance. Thus, it is the need of the hour to prevent the annihilation of such treasure of knowledge and to document and to validate the folklore food habits. Considering this in view, a survey was conducted in Moodubidri range of Dakshina Kannada District and documentation of folklore food habits were done¹. Few popular preparations, namely tambuli prepared out of tender leaves of Daddala/Kumbhika (*Careya arborea* Roxb.) which is beneficial in gastric ulcer and Manni (Porridge) prepared out of Koove/Tavaksheera/Arrowroot (*Maranta arundinacea* L.) is useful as weaning food for babies, are selected and subjected to analytical and nutritional studies.

2. MATERIALS AND METHODS

The plant materials such as tender leaves of Daddala (*Careya arborea* Roxb.) and rhizomes of Koove /Arrowroot (*Maranta arundinacea* L.) are collected from the local field and subjected to physico-chemical, phyto-chemical, ash analysis, folklore food preparation and nutritional analysis as per the guidelines of Ayurvedic Pharmacopoeia of India² and information gathered by the folklore informants.

3. OBSERVATION AND RESULT:

The results of the physico-chemical, phyto-chemical, ash analysis, folklore food preparation and nutritional analysis are mentioned below.

3.1. Daddala (*Careya arborea* Roxb.) tender leaf:

3.1.1. Physico-chemical studies³ of Kumbhika/Daddala (*Careya arborea* Roxb.) tender leaf:

Sl.No.	Tests	Results
1	Organoleptic Roopa (Colour) Rasa (Taste) Gandha (Odour) Sparsha (Touch)	Coppery red Astringent and bitter Characteristic odour Smooth

2	Loss on drying	6.75 %
3	pH	6.70
4	Total Ash	1.75%
5	Acid insoluble ash	0.35%
6	Water soluble ash	2.25%

Table 1.

3.1.2. Phyto-chemical studies³:

Sl. No.	Phyto-chemical Tests	Results
1.	Carbohydrates	Present
2.	Protein	Present
3.	Starch	Absent
4.	Alkaloids	Absent
5.	Flavonoids	Present
6.	Triterpenoids	Present
7.	Phenolics	Present
8.	Tannins	Present
9.	Saponins	Absent
10.	Resins	Absent
11.	Steroids	Present

Table 2.

3.1.3. Ash analysis of Daddala (*Careya arborea* Roxb.) tender leaf:

Sl. No.	Ash analysis	Results
1.	Carbonates	Absent
2.	Fluorides	Present
3.	Chlorides	Present
4.	Sulphate	Absent
5.	Chromate	Absent
6.	Phosphate	Present
7.	Sodium	Present
8.	Potassium	Present
9.	Calcium	Present
10.	Aluminium	Absent

Table 3.

3.1.4. Folklore Food Preparation: Daddala (*Careya arborea* Roxb.) tender leaf Tambli:

Sl.No.	Ingredients	Quantity
1.	Daddala (<i>Careya arborea</i> Roxb.) tender leaves	250 gm
2.	Grated coconut	250 gm
3.	Butter milk	500 ml
4.	Water	250ml
5.	Salt, Pepper	Q S

Table 4.

The tender leaves of Daddala (*Careya arborea* Roxb.) plant are cleaned properly to remove physical impurities, boiled in water for 5 minutes and then it is grinded with grated coconut, pepper and salt. This is then boiled with buttermilk, which is eaten during lunch by mixing with rice.

3.1.5. Nutritional Analysis: Daddala (*Careya arborea* Roxb.) tender leaf Tambli^{4,5}:

Sl. No.	Phyto-chemicals	Results
1.	Carbohydrates	9.33%

2.	Proteins	11.66%
3.	Phenols	7.88%
4.	Tannins	4.28%
5.	Vitamin-C	1.28%

Table 5.

3.2. Koove/Arrowroot (*Maranta arundinacea* L.) Rhizome:

3.2.1. Physico-chemical studies of Koove/Arrowroot (*Maranta arundinacea* L.) Rhizome:

Sl.No.	Tests	Results
1	Organoleptic Roopa (Colour) Rasa (Taste) Gandha (Odour) Sparsha (Touch)	White Rhizome Sweet Characteristic odour Smooth
2	Loss on drying	9.75 %
3	pH	6.85
4	Total Ash	4.66%
5.	Water soluble extract	21.50%
6.	Acid insoluble ash	0.45%
7.	Water soluble ash	2.85%

Table 6.

3.2.2. Phyto-chemical studies of Koove/Arrowroot (*Maranta arundinacea* L.) Rhizome^{4,5} :

Sl. No.	Phyto-chemical Tests	Results
1.	Carbohydrates	Present
2.	Protein	Present
3.	Starch	Present
4.	Alkaloids	Present
5.	Flavonoids	Present
6.	Triterpenoids	Present
7.	Phenolics	Present
8.	Tannins	Present
9.	Saponins	Present
10.	Resins	Absent
11.	Steroids	Absent

Table 7.

3.2.3. Ash analysis of Koove/Arrowroot (*Maranta arundinacea* L.) Rhizome:

Sl. No.	Ash analysis	Results
1.	Carbonates	Absent
2.	Fluorides	Absent
3.	Chlorides	Present
4.	Sulphate	Absent
5.	Chromate	Absent
6.	Phosphate	Present
7.	Sodium	Present
8.	Potassium	Present
9.	Calcium	Present
10.	Aluminium	Absent
11.	Iron	Present
12.	Copper	Present
13.	Manganese	Present

Table 8.

3.2.4. Folklore Food Preparation: Koove/Arrowroot (Maranta arundinacea L.) Rhizome Manni (Porridge) :

	Ingredients	Quantity
1.	Arrow root starch Powder (Tavaksheeri Satwa)	50gms
2.	Milk	250ml
3.	Sugar candy	25gms

Table 9.

The extracted starch (Satwa) of the arrow root is taken and mixed with milk without any lumps. To this sugar candy is added and boiled for 3 minutes. The mixture start thickening and it is allowed to cool to room temperature and fed to the baby.

3.2.5. Nutritional Analysis: Koove/Arrowroot (Maranta arundinacea L.) Rhizome Manni (Porridge)⁶ :

Sl. No.	Phyto-chemicals	Results
1.	Carbohydrates	82.95%
2.	Proteins	3.80%
3.	Phenols	0.17%
4.	Tannins	5.35%
5.	Starch	18.20%
6.	Vitamin-C	1.95%

Table 10.**4. DISCUSSION:**

The traditional food culture of Moodubidri range is a vast source of indigenous medical information. The food preparations are practiced concentrating health aspects. The preparations selected for the analysis are commonly used recipes as 'Pathya' for the management of various diseases. The scientific exploration of such foods conveys the importance of those foods in a more systematic manner.

In the present study, The Daddala (Careya arborea Roxb.) tender leaves are rich source of Phyto-chemicals which is used in the gastric ulcer in the form of food preparation called Tambuli. The earlier studies reveal that the extract of the leaves were proved in gastric ulcer, diarrhea etc⁷. Phenolic compounds: Anti aging anti oxidants, they fight against diseases⁸

The present study reveals that the Indian folklore food habits are very scientific. They use to rectify their health problems by using food as medicine.

Koove/Arrowroot has been used as vegetable in many places of India. It is rich with carbohydrate, protein and starch. Arrowroot starch extract is used to reduce the excess Ushna in the body. The Manni (Porridge) is an infant food given after 6th month of the age is helpful in nourishing.

The earlier research work⁹ says that, the arrowroot rhizomes can also be used to treat peptic ulcer. It is also reported to treat diarrhea, pain and as antioxidant. The tuber has the properties of anti-cholesterol and anti-ulcer since they have 32 glycemic index (IG) which belongs to the food category with low glycemic index. The arrowroot plants also have phenolic, flavonoid, alkaloids and saponin compound that are potential as antioxidants. Such research works are supporting documents for the wealth of traditional knowledge in food system. Thus, traditional knowledge of food is proved very scientific. Without having any knowledge or facility of modern science, they were able to identify such a wonderful healing method by food system which is called as Pathya-Apathya in Ayurveda.

5. CONCLUSION:

Traditional food habits are the symbol of culture of place. It not only depicts the passion towards the food but also the health benefits. It's not only makes people incline towards ancient culture but also to know about the healthy plants around themselves. The present study has undertaken to uplift the ancient food culture by applying modern science. The Tambuli prepared out of tender leaves of Daddala is beneficial in Gastric ulcer, skin diseases etc where as Manni (Porridge) prepared out of Arrow root is highly nutritive to the kids as well beneficial in peptic ulcer. The nutritional analysis of the selected recipes has shown rich in Carbohydrate, Starch, Protein, vitamins etc. In the present study, traditional knowledge of food system is proved scientifically by various analytical study of the prepared food recipe of Daddala and Arrow root. This type of studies creates interest in the young generation towards the multidimensional uses of local herbal wealth.

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ACKNOWLEDGEMENT

The authors are acknowledging the Rajiv Gandhi University of Health Sciences, Bengaluru for encouraging the survey research work entitled “Survey of folklore food habits of Moodubidire range and evaluation of nutritional aspect of non-documented recipe for the betterment of life style.” by sponsoring the entire project. The authors also express their gratitude to the folklore informants for revealing the secrecy of their experience for the benefit of the mankind.

PHOTOGRAPHS:

<p>Daddala (Careya arborea Roxb.)</p> 	<p>Koove (Maranta arundinacea L.)</p> 
<p>Daddala (Careya arborea Roxb.)</p> 	<p>Koove (Maranta arundinacea L.)</p> 
<p>Daddala tambli</p> 	<p>Arrowroot Porridge</p> 