

A Study of Indigenous Assamese Food Ingredients and Their Health Benefits as Perceived by Local People of Assam

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Abstract

Introduction: Assam as a north-eastern state of India has a very distinct and unique cuisine, which is largely unexplored due to its differences with the cuisines prevalent in the other parts of India. Assam being surrounded by hills on one side and Brahmaputra river on the other has its cuisine influenced by the fertile river banks, the various tribes and the hilly terrains.

The regional cuisine of Assam is very seasonal and produce orientated. The focus on health benefits of food is a very important aspect while planning an Assamese meal.

Purpose: The purpose of this research is to find out how the local people residing in Assam use the indigenous produce for health benefits and find out how important is the health aspect of food for them.

Research Design & Approach: The research is done based on primary data as a questionnaire circulated amongst local people and secondary data has been collected from various books articles and websites.

Findings: The study findings indicate that indigenous ingredients used for health benefits play a vital role in deciding the food preferences of the local people.

Practical Application: This research will enlighten everyone and increase awareness about certain ingredients which are not well known to us.

Originality/Contribution: This research paper is an original work, done to find out the benefits of natural ingredients used in Assam which can help people at large to focus on health aspect of food which will help boost immunity and physical health as a whole.

Keywords: Indigenous Ingredients, Health, Local, Cuisine

Introduction

Assam with its unique culture and food habits has been very rich in heritage and local produce. Brahmaputra and its fertile banks have given Assam agricultural abundance and a variety of indigenous ingredients. Local markets of Assam display an eclectic array of ingredients influenced by the diversity of terrain and culture. Though globalisation and development has affected business and lifestyle of the region hugely in the past decade, people here are yet very passionate about preserving the traditions and authenticity of their cuisine. A huge number of restaurants here display local cuisine in its original form and simplicity. The variety of taste is felt here when one visits the different restaurants having various tribal influences. It is overwhelming to observe the various unique ingredients and how conscious people are about the health aspect of it.

Earlier it is said that tribal Assamese cuisine did not have any use of oil, their cooking involved 3 basic tastes that is alkaline, sour and bitter. It is seen till date during the summer season, the abundance of sour ingredients like 'Autenga'(elephant apple), Thekera (dried local fruit) and other sour leafy vegetables are consumed to keep themselves cool inside. An alkaline liquid made from banana peel ash called 'Khar' or 'Kol Khar' is seen to be used in various vegetarian and non vegetarian dishes, known to have great digestive properties. An extremely bitter variant of jute leaf is cooked here with meat and fish and consumed as a delicacy. The use of fermentation and pickling is another unique trait here with the unique local

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ingredients and processes. Even today there are Assamese households in the villages who still find remedies for their ailments in their garden.

The balance of flavours, colours and ingredients seen here displays an underlying consciousness about what they eat, how they consume it and when they consume it. The evolution of the Assamese cuisine today has been because of varied influences of different parts of the state and its neighbouring countries. This preservation of age old techniques and habits along with evolving taste buds is what shapes Assamese cuisine today.

Objectives

- To study importance of indigenous food ingredients in Assamese cuisine.
- To discover food ingredients which are indigenous to Assam.
- To study health benefits of indigenous food ingredients as perceived by local people of Assam.

Research Methodology

The approach of our research work is of qualitative and quantitative nature which allows us to approach the local people of Assam to collect the data regarding their opinion towards importance and health benefits of indigenous food ingredients in Assam and analyse their opinions and preferences. We will statistically analyse the opinions on the local respondents and also try to evaluate their opinions and preferences through open ended questions.

Primary Data: The primary data required for research was collected by using a questionnaire with a combination of close ended and open ended questions to better evaluate the opinion and implement the 'mixed method'.

A questionnaire was drafted and circulated among local people of Assam to obtain their responses.

Secondary Data: Secondary data was collected from articles, books, websites etc.

Review of Literature

Yutika Narzary, Jahnovi Brahma, Chandan Brahma and Sandeep Das (2016, December) The authors in their

research have explained in details about various fermented food and drinks and their significance on the society and culture of the region. Various tribes and regions have various diverse method derived from traditions and customs prevalent from years. These fermented foods and drinks contribute to better health and livelihood of the local people. The scientific basis of fermentation and its benefits have the capability to boost the economy of the region.

Upasana Sarma, Viney Kumar and Akanksha Yadav (2020) The authors in their paper concluded that in Assam though banana and other parts of the plant are utilized, banana peel is underutilized. The great amount of unutilized byproducts from the existing banana industries may be utilized for other purposes like recycling of agricultural waste. Banana being an integral part of Assamese food habits, numerous recipes involve bananas and it is an integral part of Assamese culture. Assam being widely diverse in respect to various tribes but the utilization of banana and the tree itself is a unifying factor for them all. There is ample opportunity to find new ways to utilize bananas as an ingredient for various recipes which could represent Assamese culture and ethnicity. The promotion of age old recipes and innovations of new ones in an international platform may result in better tourism opportunities and upliftment of Assamese community.

B. H. Choudhury, S. Islam and Om Singh (2021) The authors in their paper, on their research conducted in the Jorhat district of Assam, mention that people still depend greatly on natural remedies from various ingredients from plant sources for nutritional and medicinal requirements. The authors also mention that the phytochemical properties of various plants can be the cure for various chronic illnesses like cancer, heart diseases, diabetes, liver ailments etc. Majorly the inhabitants of the area depend on agriculture and agro forestry as their primary source of livelihood, and share their close connection to nature. However, the younger generation is moving away from these connections and knowledge of plants. Poor communication of these sources is reducing their acceptability among the youth. Regardless, the older generation still guard and utilize this knowledge and the abundance of natural resources.

Ripunjyot Sonowal (2013) The author in his research on Sonowal Kachari tribe of Dibrugarh district mentions the

significant role of medicinal plants in providing primary healthcare to the community. The author in his research has endeavored to discover diverse indigenous ingredients and the knowledge of their utilization by Sonowal Tribe of Assam.

Ringshangphi Khapudang, Somesh Sharma and V. K. Joshi (2018) The authors in their review paper have discussed about various fermented products, their technology of production and development of starter culture. The authors mention that various regions, producing a variety of fermented foods, enrich their diets with various essential nutrients like amino acids, essential fatty acids and vitamins and provide remedies for various ailments. These fermented foods apart from providing vital nutrients also provide diversity of flavours, aromas and textures to the meals. Apart from its taste and health aspect the authors also mention their role in economic development of various communities involved in extensive production of these delicious products.

Arani Saikia (2013) The author in the paper endeavors to discover some of the pre colonial food practices of Assam in regards and reference to the Brahmaputra valley. The paper findings show that the unique behavioral traits and material culture of Assam is the reason for the unique food habits of the region. The diversity of tribal cultures and their interactions has definite impact on the local people. However the process of assimilation of food practices was very slow. The diet of the local people essentially displays simplicity and health as an integral aspect. This type of diet has been successful in maintaining nutrition and satisfying hunger of the rural people.

Pallabika Sarmah, Samutjal Saikia and Ashim Saikia (2019) The authors in their paper express that popularity of traditional food is increasing in Assam and that the locals are more inclined towards rediscovering these food items. The locals are realizing the health and medicinal importance of consuming the traditional foods. Apart from consumption and preservation of the traditional cuisine the people of Assam also feel that increase in consumption of these food items can help them become self-dependent. The consciousness of health and nutritional values of these foods is spreading extensively throughout the state and raising demands for the same.

Lotika Saikia (2019) The author in her article about Assamese marriage song and their deep connection to the culture of the region mentions about rice and fish, two integral parts of Assamese cuisine. The various products and their mentions in traditional songs show the immense importance of food in Assamese culture.

Data Analysis

The questionnaire used had 13 questions, 11 close ended 2 open ended. The data received has been statistically analyzed in the tables below. Qualitative analysis has been done on the open ended questions. It was found in the analysis that 67.8% people stated that the indigenous ingredients are of high importance in their kitchen. Majority of the respondents also expressed that indigenous ingredients are not losing their importance and still hold a significant place in Assamese cuisine. A significant part of the respondents also agreed that Assamese cuisine focuses on seasonal produce and dishes in an Assamese kitchen adapts itself to cope with seasonal changes.

Table 1: Statistics of Opinions of Local People of Assam Regarding Indigenous Assamese Food Ingredients

	<i>Please Rate the Importance of Nutrition in Regards to Your Daily Meal</i>	<i>How Important are Native Ingredients in Your Kitchen?</i>
Not important	1	4
Slightly important	7	9
Important	38	62
Very important	97	68
N	143	143
Mean	35.75	35.75
Standard deviation	38.04	29.38

Table 2: Statistics of Opinions of Local People of Assam Regarding Indigenous Assamese Food Ingredients

	<i>Do You Feel the Popularity of Indigenous Ingredients is Reducing with Time?</i>	<i>Assamese Home Cooking and Daily Food Habits Display Seasonal Produce and Health Friendly Dishes</i>	<i>Assamese Home Food Changes to Replenish Nutrients Needed During a Particular Season</i>
Strongly agree	9	59	40
Agree	24	45	64
Disagree	51	31	28
Strongly disagree	59	8	11
N	143	143	143
Mean	35.75	35.75	35.75
Standard deviation	20.16	18.83	19.29

Table 3: Statistics of Opinions of Local People of Assam Regarding Indigenous Assamese Food Ingredients

	<i>Do You Consume Any Food Item Solely for Nutritional Benefit?</i>		<i>What Among These Would be the Most Important Factor for Consuming Local Ingredients?</i>
Yes	62	Taste	33
No	17	Health	46
Occasionally	64	Tradition and Culture	64
N	143	N	143
Mean	47.66	Mean	47.66
Standard deviation	21.69	Standard deviation	12.71

Table 4: Statistics of Opinions of Local People of Assam Regarding Indigenous Assamese Food Ingredients

	<i>Does Your Home Cooked Meal Feature Autenga (Elephant Apple) or Thekera (Dried Local Fruit) During Summers?</i>	<i>Do You Agree Herbs Like Manimuni (Indian Pennyworth) Or Masundori (Himalayan Spinach) Consumed on Regular Basis for Gut Health?</i>
Regularly	17	33
Occasionally	85	98
Never	41	12
N	143	143
Mean	47.66	47.66
Standard deviation	28.15	36.60

Table 5: Statistics of Opinions of Local People of Assam Regarding Indigenous Food Ingredients

	<i>Which of These Indigenous Ingredients is Used Most Often in Your Kitchen?</i>
Khar	25
Dhekia	17
Bamboo shoot	26
Autenga	6
Kajinimbu	35

	<i>Which of These Indigenous Ingredients is Used Most Often in Your Kitchen?</i>
Bhootjolokia	25
Others	9
N	143
Mean	20.42
Standard deviation	9.52

On analysis of the ingredients it was found that Kajinimbu, Bamboo shoot, Bhootjolokia and Kol khar are among the

most popular indigenous ingredients, closely followed by Dhekia or Fiddle-head ferns.

On analysing the open ended questions where respondents were asked about the various indigenous ingredients, it was found that truly native and rarely mentioned ingredients were found through the research. Listed below are some of the different ingredients and their health benefits as mentioned by the respondents:

- Narasingha (Curry Leaves) - Eliminates bacteria, and prevents in weight gain. Its curry is very beneficial for fever and cold.
- Silikha (Haritaki) a source of vitamin C, it is used in most ayurvedic medicine. Dry “Silikha” is also used in ‘triphala powder’ which is a daily using natural health supplement.
- Sewali-Phul (Night Jasmine/Coral Jasmine) - It is antibacterial, antioxidant, anti-fungal. Normally Assamese people cook curry of it and it’s only available during the month of October.
- Khar - It is known to cleanse your stomach curing digestive disorders.
- Silkworm - Silkworms is able to help reduce fatigue, prevent Alzheimer’s disease, minimises the occurrence of diabetes, and even helps keep muscles stronger.
- Paro Mangxo (pigeon meat) - It is considered to give the body warmth and is consumed during the winter months.
- Banana stem - It is a rich source of fibre and helps in weight loss.
- Khutura, Paleng - It is good for stomach and eyesight.
- Matima Dal - It’s very good for our health also used in ayurvedic medicine.
- Banana Flower - The banana flowers are loaded with Vitamin C, A, E, fibre & potassium that are the sources of healthy nutrients. The ultimate Diabetes controller purifies blood, averts lung and heart diseases. Promotes healthy kidney functions.
- Jolpan - The word Jolpan means all pitha, laru, and tea. It is consumed for breakfast, and it’s beneficial for our health being light on the stomach and easy to digest.

- Bhedai Lota - It useful for abdominal pain, diarrhoea, dysentery and it stimulates the central nervous system.
- Kharoli - This can be cooked as condiment and eaten as a side dish with rice. It is considered beneficial for gastrointestinal problems.
- Bilimbi Tenga - Good for skin and helps in strengthening our immune system.
- Dupor Tenga (Bryophyllum Pinnatum) - It is used for treating kidney stones.
- Punoniya Xaak (Leafy Vegetables) - It is good for eyesight.
- Tengamora (Leafy Vegetable) - This provides relief from cramps and menstrual pain, blood pressure, coughs, colds and fever management.

The above mentioned are the local respondents’ opinion about these ingredients. Multiple ingredients were mentioned by more than one respondent.

Findings and Conclusion

Through this research the unique cuisine of Assam was explored from the perspective of health and indigenous ingredients. It was thoroughly awakening to find the amount of consciousness found in the current generation and its benefits as part of their daily diet. With evolving taste buds and availability of various exotic ingredients in the markets of Assam the food habits have also evolved but people at large and even the city dwellers, 54% of our respondents being from Guwahati city, have not forgotten or let go of the indigenous ingredients and traditional food habits. It was also enlightening to discover that majority of the respondents were consciously consuming the seasonal ingredients for their health benefits. More than 15 unique ingredients were discovered through this research along with their health benefits which are unique to this area, and some even having medicinal properties. This study was enlightening and exciting at the same time to discover the outlook of the locals and their enthusiasm to discuss about their local culture. Few ingredients considered taboo in other parts of the country, like silkworms and pigeon meat, also came up in this research with their seasonal and health significance. The rare quality of people of the region to stay connected to their roots while accepting

the new and utilizing the traditional knowledge passed on over generations is both inspiring and encouraging. But it is essential to mention that there are far more ingredients left to be discovered and understood both from the taste and health perspective, from this region, as both entwine and become one in the local food culture.

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