



# INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

## Past and present of Bengali's kitchen through the ages of History and its compatibility with health

Dr. Sudatta Banerjee <sup>a</sup>

Dr. Debdip Khan <sup>a</sup>

<sup>a</sup>Department of Business Administration, Burdwan Raj College, Burdwan, W.B., India.

**Abstract:** There is a big humor that where other people of the world “eat to live” Bengalis “live just to eat”. Every Bengali festival/occasion always followed by a huge banquet. There is a big bonding of various cuisines of fish and rice with Bengali's culture which has a unique feature of being an assimilation of the best of the world gastronomy and Indian diverse cookery. West Bengal is place enriched by multiple rivers, with the main crop paddy. Many types of fishes are available here. All Bengali cuisine is full of protein (especially different pulses and fishes) and huge roughage. In ancient era, every spices used in Bengali's kitchen has its own medicinal value. Before industrial revolution pesticides or genetically modified food was not there. Our objective is to take care of health with taste and conservation of our Bengali's cultural uniqueness. All Bengali rituals and festivities end up with hearty feasts, involving an astonishing number of intricately prepared dishes. In this work, we have tried to analyze the development of Bengali cuisine in the early modern age, i.e., the 18th and early 19th centuries, an era when colonial influence was still not predominant. We have focused primarily on West Bengal, India and mainly discussed the history of cooked food and the impact of those foods on health from past to present days. The industrialization of the agricultural sector has increased the chemical burden on natural ecosystem which is taking the Bengali far away from their ancient food, culture and health.

**Key words:** Bengali's kitchen, Food value, Festival, Culture, Health, Historical remembrance.

**Starter:**

We all know that Bengalis are always crazy about food. In Bengal, from birth to death everything is always celebrated by food. Usually Bengalis from ancient times to till date take some special food (like 'uchhe vaja', 'bora' made from different leaves, 'shak vaja' etc.) as starter. According Maharshi Charak, Maharshi Shusruta, Maharshi Dhanwantari and Jeevaka every Bengali used to eat fried food (bitter, 'shak') in the beginning of day time meal which now a day introduced as starter. According to Bengalis, food should be taken on account of health.

The 18th and early 19th centuries are crucial phases in Bengal's history, when Bengali culture emerged in many of its present aspects. Rooted to its indigenous elements, it was also heavily influenced by the Mughals and the Europeans who were prominent in Bengal by 1650. In the 18th century, the class of bhadralok, who would play a decisive role in Bengali society and culture from the 19th century.

Members of this class were Hindus, mostly of high caste, literate, employed in the offices of Mughal officials and 'zamindars' or teaching institutions, and cultivated the cosmopolitan Mughal culture. Also, Shakti worship, a typical feature of the Bengali Hindus, started becoming popular around this time. All these developments influenced the shaping of the culinary culture in pre-modern Bengal. ( Achaya, 1991.) [1]

From the 15<sup>th</sup> century onwards Bengali's culture was acknowledged by other people of the world. After going through the entire 'Mangal Kavyas' and the 'Vaishnava' texts we can deduced that from the early 15<sup>th</sup> to late 17<sup>th</sup> centuries about the food habits of Bengalis. From the 'Mangal Kavyas' we can draw inference of metrical configuration about regional goddess which were very popular among pastoral population. The bucolic people played a vital role in amalgamating the Hindu discerning in medieval western Bengal. From different historical wellspring like 'Manasamangal Kavya' we can enlighten about the unrestricted devouring of meat and wine. That time wine was usually made from locally available things like milk, coconut water, Palmyra juice, sugarcane and rice which consumed as refreshment.

According to Narayan Deb's 'Manasamangal Kavya' in the auspicious wedding of Behula there was 12 types preparation of fish and 5 varieties of meat with different style cooking were served to the guests (Banerjee and Das, 1908).[5]

According to Ghanaram Chakravarti's 'Dharmamangal' we can come to know that not only the kings but also the monks were amused with different types of meat (Ghosh 2003). [18]

According to Banerjee (2010) [3], Nevertheless, Sri Chaitanya Deb played a crucial role in metamorphosed Bengali cultural and food habits to a substantial magnitude. Sri Chaitanya Deb with some of his fellow workmate cherished virtuous food but they follow strict vegetarian diet. In addition to this we can present the example of Vaishnava feast where different types of food were prepared but all are stringently vegetarian dishes. Rice

with 'ghee', 'shak', 'muger dal', mixed curry with 'patal bori' and other vegetables, fried fresh 'neem' leaves with or without other vegetables like potato, egg-plant etc. fried egg-plant, 'bori' and 'mocha ghanto' (bananiflower) with coconut, dense milk, 'payesh' (sweetened rice with milk), banana, 'dahi' (sweet curd), milk and dried rice (chire) etc. According to Pratul chandra Gupta, Itihaser Golpo (1986) onions and garlic were also not at all healthy to consume and also potato was not introduced as an essential components of Bengali's daily diet. Many elite class Bengali families were not interested in taking non-vegetarian items in their daily consumption through the impact of Chaitanya's way, even the Shaktas were not interested in taking non-vegetarian on daily basis some part took mutton and fish only to celebrate some special occasions. Not only that they sometimes ate the meat of deer and lamb.

This vantage point they carried out in the 18th and in the 19th century also. Though East Bengal is straddled by many water bodies (rivers), so they were developed fish eating habit which was more widespread at that time. In the words of Bijoy Gupta who was a composer of Manasamangal, people were like to have different types of fish like kharsun, prawn, rui, chital, bain and shol, boyal etc., which they cooked with lots of spices like green/red chilli paste and cumin. That time People were fond of Turtle meat and eggs (Banerjee and Das 1943) [4].

Framing the same time the Bengali's of urbanized area were also stipulated for better quality and different kinds fish. Bharatchandra had given a list of fish that were eaten by his coeval like bhetki, bacha, kalbos, pabda and ilish. Remarkbly, the names of those fish were not found in the early times these names are not found in early times which were more rural poetic content. Despite of all, Most of the Brahmins were the followers of a typical orthodox culture. During the festival season they usually ate luchi, kachuri, vegetable preparations like chhakka and shakbhaja, and a variety of sweets to celebrate the particular occasion. During that phase Bengali cooked mutton in their kitchens but in a very simple way even they cooked mutton without using garlic, onion or other heavy spices. zamindars or the landed noblessenormally intake a menu in their daily dining that may be established in ByanjanRatnakar, ina classic cookbook which assembled at the biding of Mahatapchand, who was the Maharaja of a region named as Barddhaman. This wonderful endeavor was written by the Niyamat Khan who was the chief cook of great Mughal emperor Shah Jahan was strongly inducted by the recipes used to cook at that time. That considered 18 types of kebab and 19 types of kalia that were periodically overindulged by the Barddhaman'sMaha Rajas. (Banerjee, 1908) [5]

In the 11th century Bengali's first text were introduced in the name of the Charya padas which delineate fishing and hunting along with the cultivation of different kinds of food crop including rice and sugarcane, still we can conclude that pulses(dal) were not introduced at that time. [6].

From the 'Mangal kavyas' of 15<sup>th</sup> century we can come to know that people of that phase used to eat different kinds of dal(pulses) and they cooked those kinds of pulses in different cooking procedures. Chitrita Banerji (2005) from the perspective of Bengal, she notices that there exists many plebeian with other countries like China and also Southeast Asian countries, where different pulses and lentils were perhaps not well known except soybeans, which is a major source of Tofu. Not only that time but in present days also we have to secure a major amount of lentils from exterior part of the State. She also proclaimed that simultaneously supply of fish which is also a better source of protein replace the necessity of pulses (dal). The transformation took place because of appearance of the culture associated with Vaishnava Bhakti and as a result the followers have to maintain to remain strictly vegetarian. As a consequences, different kinds of pulses (dal) became happily acknowledged by the majority of Bengalis as a alternative of fish and meat (Banerji, 2005) [7]. During that phase Khichudi was a very notable preparation of Bengali cuisine mainly offered to the God as "vhog" and taken by the people as "Prasad". Khichuri is still famous among Bengalis on account of any Pujo which is made with rice, dal and some spices and acts as an important determinant of necessity of rice and dal in Bengalis day to day life. (Banerji,2005)[7].

From the work of Basu, 2012 [8] it is evident that, the unique gastronomy culture of pre-colonial Bengal that carried a lots of monotonous characteristics made Bengal completely eminent from any other parts of the entire country rather world. Traditionally, Bengali dishes are separated into four types, such as Charbya (food which is to be chewed like rice, fish, meat etc.), Choṣhya (food which is to be sucked or liquids like dal, ambal, tak etc.) Lehya (food which is to be licked like achar, chatni) and Peya (drinks like sorbot, milk). Alike, the array of eating habit is also mentioned in many sacred texts of incredible Bengal which was also specified in a couplet of Halayudha's Brahmanasarvasva. According to Vishnupurana, revamp in northern part of Indiasummarize the eating succession as follows: normally every meals started with the sweet dish that pursued by salty dishes and jabbed with bitter and spicy dishes. But on the other opinion, according to Brihadharma Purana, organized throughout the province of Bengal, recommended that every meal should start with boiled rice with ghee that succeeded by spinach and other vegetables, and the meal should end with payes (milk with boiled rice)

From the ballad of the Prakritapaingala, that relatively unflappable near about 13th century by pseudonymous authors who interpret the eating habit of that time which was very provocative. According to the ballad: "oggarabhattacharambhaapatta, gaikaghittadugdhasajutta |mainimacchanalichagaccha, dijjai kantakhapunabanta" which means the man is enough fortunate whose wife serves hot rice with ghee, mouralamach(one type of small fish), paatshakvaja ( fried leaf of jute plant) on a leaf of banana and at the end the wife offered hot milk (Bhatia, 2009) [9].

Mukundaram Chakravarti, in the 16<sup>th</sup> century in Chandimangal Kavya quoted about various types of vegetarian and non-vegetarian preparations. In dispersion through we can come to know about shukto (an authentic Bengali preparation which taste is little bitter), prepared with neem leaf, seem, Indian pumpkin (chalkumro) and egg plant which was remarkable. Apart from this, jute leaf fried in ghee, kusumbari (lentils mainly biulir dal that first grind and then sundried, generally fried in oil), prawn, chital fish fried in mustard oil and hog-plum with palang (spinach), fig with prawn, chaltarjhol (kind of soup), puishak (bassela), fulbori (this is also a designed item which prepared from dal and people eat after frying it in mustard oil) and kachur tarkari (unique dish of an digestible edible root) were very famous during those days. Mukundaram Chakravarti mainly composed his assortments of ballad in the Medinipur region. So, we can easily conclude that Mukundaram's all portray of prevalent food and culture was a reflection of that particular region [10]

From a specific category of the Chandimangal Kavya, Mukundaram rehearse an example of Phullara where she had to prepare some specific preparations for Kalketu as the main combatant. The dishes were a combination of broken boiled rice, lentils that were boiled in water with some spices and bottle gourd, parched natural potato and 'ol' (an Indian vegetable), 'kachu' and 'aam-ada', and 'ambal' (a soup like that taste sour). At last, the combatant used to consume haritaki (black myrobalan). In addition to this variant of this text represents some other dishes in the same chapter which includes deer meat, burned mongoose and 'kachurghanto' with 'amra'. [11].

During the late 18<sup>th</sup> century the culture of food continued in almost uninterrupted way. Bharatchandra Ray who is the author of Annada mangal described different preparations of medieval Bengal in a substantial manner in the late 18<sup>th</sup> century. There exists an chapter where Annapurna debi (daity) cooks certain specific dishes. Amidst them, 23 different preparations of vegetarian dishes are specified like sarsadi, ghanta, different types of fried spinach, thick soup of gram pulse, 'arahad dal', 'mug dal', 'mas', 'barbati', 'batul', and 'matar dal', 'bada', 'badi', 'banana', radish, coconut fry, milk and 'dalna' prepared with 'thod', 'shuktoni', jackfruit seeds with sugar, bottle-gourd with 'til' and 'pithali', egg plant, and different dishes of pumpkin. From the non-vegetarian delicacy 'katla', fried chital fish, koi, 'magur' and shol fish, boiled turtle egg (ganga fal) and the different variant of meat dishes like 'shikpora' (meat burnt in a spit, during the Mughal period that known as kabab). Aside from the above mentioned preparations there were also few different offbeat arrangement of dishes like cooking of bamboo flower, and dalkachu and odkachu. [11].

A Sanskrit mahakavya named as Shriharsha's Naishadhacharitat that serene in the 12<sup>th</sup> century and administered the clarity of the eating habits of Bengalis. According to the passage, in the festivity of wedding ceremony of Nala and Damayanti (who were the combatant) different variant of preparations were served, like cooked vegetables, fish, mutton, deer meat, different varieties of *pitha* (a kind of sweet dish), flavored drinks and 'tambul' or 'pan'. The passage from Prayashcittaprakarana which was written by Bhavadeva Bhattawas



characterized through a few aspects of the Bengali cuisine. His texts describe how rice, fish, meat, different milk products are consumed at that time.

The general Bengali kitchen was turned through different remarkable changes with various preparations along with different additive also that can be best understood from the history of 18<sup>th</sup> century. But most importantly there were remain a few perceptible food value of whole cuisine from then to now. At that time vegetables like potatoes, cauliflower, cabbage was not recommended in legitimate basis. Eating meat was not at all established acceptable during festival like wedding ceremony and the thread-wearing ceremony for Brahmin community only (upanayana). Because of contagion nature of Salt every food was prepared without but Salt was served in a sovereign basis to all guest who were invited in that particular occasion.

Considering the time of the establishment from civilized panorama of gourmand Bengal is always popular for its own unique food and cuisine. West Bengal is always acknowledged for its outstanding fertile agricultural land and extraordinary production of paddy. Concurrently, the rivers of Bengal are an ostensibly bountiful resource of different variety of fish. As a result, Bengalis grow their habit of eating fish and rice as a staple food from the archaic time. Not only fish and rice but also Bengalis are traditionally famous for their extra ordinary preparation of Posto (poppy seed) and different types of vegetarian and non-vegetarian preparations along with different pulses.

Simultaneously, after the subsequent staying of Europeans, Muslims, and lower-caste Hindus another major commencement took place and they started bakeries and manufacturing workshops in the Bengal's colony from the second half of 19<sup>th</sup> century. In the year 1841 David Wilson entrenched at Old Court Street, Calcutta, a hotel-cum-bakery named as Auckland Hotel at Old Court Street, Calcutta which is now known as Kolkata, that proximate as the Wilsons Hotel. Another noticeable bakery was started in 1881 which tagged as Federico Peliti. Girish Chandra Mondal set up a tandoor in Central Calcutta for making deshi biscuits in 1887. After five years he was joined by his neighbour, N.N. Gupta who was a neighbor of Girish Chandra Mondal joined that tandoor after 5 years and the organization was acknowledged as V.S. Brothers. Afterwards some years the company shuffled to DumDum. In 1897, Again this company reintroduced as Gupta and Company a new name with a new brand, the Hindu Biscuits. During the Swadeshi movement (in the British Period) the company accepted noticeable stimulation to make deshi biscuits because of the brand name but earlier they used to produced Western style biscuits. During World War I, Finally the name has been reciprocated to Britannia Biscuits Co. At present Britannia is one of the most assertive biscuit brands throughout the India.

Sudakshina Sen (1859–1934) shared her antecedent involvement of consumption of bread in her autobiography named as Jivansmriti. In starting, she was cut off by the aroma but after a few times she was having her bread without any mess. Not only autobiographies but also novels and stories used all new food piece as a signature of freshly embedded culture throughout the 19<sup>th</sup> and 20<sup>th</sup> centuries. All those food pieces indicated people of Bengal as a messenger of the pretended modernized culture. On the other side in different

circumstances, these food items took an active part in general degradation of caste and religious belief degradation because that time according to cultural and caste norms or belief consumption of those food pieces was strictly prohibited. Earlier all those food items were generally produced by the lower caste or Muslims. According to Hiteshranjan Sanyal consequences of that period or at that time if any person who belongs to higher caste by chance consume those foods from another person who belongs to lower caste then according to the societal rule the bygone person will lost his or her position in their old carried cast.

All these new food pieces became an intimate portion of the Bengal's provincial delicacy near about the end of 19<sup>th</sup> century. Through different books that are highly related to health it has been possible to know about nutritional value of bread, biscuits etc. In the opinion of the author Chunilal Bose bread is a extreme nutritious food to intake on daily basis in turn of 20<sup>th</sup> century rather in the year 1910. [11]

Swami Vivekananda, wrote an essay in the year 1899 by the name of 'The East and The West' and in his essay he vigorously castigates about eating of bread. In the opinion of Swami Vivekananda in the making of bread flour has to mix with yeast which is not at all healthy for regular consumption. As a consequence, consumption of bread should be stopped categorically. He also mentioned that, if such situation originates where we cannot stop eating bread then we have to eat the bread after toasting it. According to him yeast is used to ferment the flour to give a proper texture to the bread and any fermented food is not at all healthy. He suggested not to take any fermented food because according to our shastras it restrain eating such type of fermented food. After going through such article related to food we can come to know that is food is always a factor of major priority. Barring the curd (which is very healthy and salutary) all another food items that transformed from sweet to sour is strictly restricted in our shastras 'shukta'. If you are unable to avoid bread, then go for a fully toast on the combustion. [12].

Rabindranath Tagore in 1903, afterwards the Vivekananda's cautioning people about the consumption of bread wrote a story named by Karmafal and in his story Rabindranath Tagore criticized the process of reflection of European protocol and food pieces like a dialect of improvement. According to this story, the combatant Satish who was a blind supporter of European culture and decorum in a Suited-booted Babu (wearing coat, hat and long shoe or boot) and preferred to have bread and biscuits along with considering himself as an advanced person at that time. In conclusion of that story the combatant finished himself from overall monetary disaster for the sake of his so called advanced life style.

Prafulla Chandra Roy who was a renowned scientist and also take an active part in national movement wrote an essay in the year 1938 which named 'Chira, Muri, Khoi o Biscuit' in Bharatbarsha (India). Prafulla Chandra in his composition vigorously proclaimed European biscuits can be easily replaced by Muri (Indian puffed rice) and Chira (flattened rice) which have more nutritional value and also economic than biscuits. Through his tablet he gave us the entire idea about the nutritional value that consist in these type of food (Muri and Chira), not only that he also proved percentage of vitamins is very low in comparison to puffed rice and flattened rice. He also

recommended the advantages of coconut which is another conventional food item consumed by all Indians. Above all he tried to develop a westernized influence free contemporary food culture among Indians which should consist of a major nutritional value.

Consequently, a substantial change took place in the cumulative nature of Bengali's culture and food habits with and within the time frame which was also very helpful for the Bengalis in conjugating with different culture of different region, without any hindrances. Throughout the journey the path was not constantly in a favorable and gentle position but ultimately the process of embodiment took place. Bengali's culture was always progressive with unique air of flexibility and throughout the process it always invited the fresh wind of freedom and dispensation along with separating the trammel of religious stipulations and different caste division system. In the 19th century This process of embodiment was going through a convincing turn by Western food pieces which became an necessary integral part of being modern that launch a philosophical interpretation in the daily diet of the middle class Hindu family.

**Methodology:** This paper is based on a complex combination of desktop research and physical questionnaire method. The data was collected from the secondary sources along with some primary data which was collected from a questionnaire from some old and young people directly who can give some real life experience from their past and present. Analyzing the questionnaire, it is clear that foody Bengalis carried out segregated platter as starter, main course and desert in their daily meal. Sometimes we relayed on oral interviews of older people in far flung rural areas of West Bengal. The primary data collected from the young Bengalis are not at all compatible with the secondary data which has been collected from different historical sources.

#### **Main Course:**

Among all the region of India, Bengali cuisine is the most authentic cuisine over 1000 years which is highly appreciated all over the world. Presently Bengali's cuisine is a mixture of so many different cultures like European, Portuguese, British, Chinese, Afghan and other foreign countries including South Asian countries. Not only that, we can come to know from the historical background that there was an impact of Turkey cuisine in early thirteenth centuries. Though Bengal has a highly fertile agricultural land with many rivers so Bengalis always include rice and fish as their main course of food along with different vegetables and pulses.

The people of Bengal faced remarkable changes in their food habit in the 18<sup>th</sup> century. Various types of fried and non-fried sweets made up from posset or cottage cheese ('chhana') entered the Bengali's kitchen. Till the 16th century, Bengalis could not be termed connoisseurs of sweets as they were satisfied with simple 'dudh-chire' (milk and flattened rice), 'dudh-lau' (milk and gourd) and 'monda'. Some country-made crude pulses (mung) and coconut products were also available. Many attributed the sudden development of the sweet industry in Bengal to the Portuguese. It is impossible to think of Bengali food without sweets made of posset or cottage cheese; 'rossogolla', 'sandesh' and 'chumchum' are inseparable parts of Bengali culture. Actually, one cannot find any mention of cottage cheese in Bengali texts till the 16th century, as among the Hindus curdling the milk to



make posset and cottage cheese was considered improper. Cottage cheese made in Portugal is almost identical with the Bengali version of cheese (chhana), so many credit the Portuguese with importing cottage cheese to Bengal. The Portuguese introduced three types of cheese in Bengal: cottage cheese, Bandel cheese and Dhakai paneer. However, one may attribute the improvement of Bengali confectionary in the 18th century to urbanization and the growth of a cosmopolitan urban culture. In this era, Murshidabad, Barddhaman, Bishnupur and Krishnanagar in western Bengal, along with Dhaka and Natore in eastern Bengal became major urban centres. Naturally, a landed and professional elite (bhadralok) populace grew up there which was not satisfied with simple country-made products and demanded more sophisticated food products. Later Bhabanicharan Banerjee noted how in the early 19th century urban centres such as Janai, Shantipur and Barddhaman were becoming well known for specific sweets like 'rasbara', 'moa' and 'ola'.

Along with the Portuguese, another group of people who profoundly influenced Bengali culture were the Mughals. Before the Mughal conquest of 1576, Bengal was ruled by Muslim rulers of foreign origin who had no connection with Delhi, and therefore were susceptible to indigenous influences. However, after the Mughal victory, Bengal became a peripheral part of an all-India Empire and its regional identity was subsumed. The governors and their officials were inhabitants of north India and returned after their terms in Bengal. Hence they never became acculturated. Influenced by them, many among the Bengali elite started practicing north Indian customs and rituals (Banerjee and Das 1943:429)[4]. By the late 17th century we note the presence of a number of Mughal-influenced items in the Bengali repast. Bharat chandra Ray penned an authentic picture of the early 18th century Bengali life in his Annada mangal, which gave a list of dishes popular among the Bengalis. Here we find mention of turtle eggs fried with spices (boda) and sheek kababs (Ghosh n.d.). Another writer Nehal Chand in his Paus Parban talked of 'kalia', 'kebab', 'kofta', 'korma', 'polau', 'dum' and 'bhuna' as Bengali favourites (Banerjee 2010[1966]:262). Meat cooked with onion, garlic and rich spices in Mughlai style became a part of the Bengali culture in the 18th century and continued till the early decades of the 19th century.

So we can understand from the 18th century the mainstream Bengali kitchen were turning to various changes with different cuisine with different ingredients also. Still there was some noticeable food value of each and every cuisine from now a today. Potatoes, cauliflower, cabbage were not introduced in regular basis. Meat was not found good sign during festival like marriage and the thread-wearing ceremony (upanayana). Salt was not used in every cooking rather salt was given separately to the invitees, for its contamination nature.

Bengal has been famous for its food and cuisine ever since the establishment of civilization in the landscape of gluttons. From the ancient times, rice and fish emerged as the staple food for the Bengalis. Apart from fish and rice, Bengal has had a rich tradition of many vegetarian and non-vegetarian dishes along with pulses and 'posto'(poppy seed).

Gradually, from the second half of the 19th century, Europeans, Muslims, and lower-caste Hindus also started to establish bakeries and manufacturing workshops in the colony. In 1841, at Old Court Street, Calcutta, a hotel-

cum-bakery was established by David Wilson, named Auckland Hotel which later became known as the Wilsons Hotel. In 1881 another famous bakery was started, named Federico Peliti. In 1887, Grish Chandra Mondal set up a tandoor in Central Calcutta for making deshi biscuits. After five years he was joined by his neighbour, N.N. Gupta, and this firm was known as V.S. Brothers. After a few years the factory shifted to Dum Dum. In 1897, this factory came up with a new name, Gupta and Company, and a new brand, the Hindu Biscuits. The company primarily manufactured Western style biscuits, but because of the brand name, during the Swadeshi movement the company received considerable impetus. During World War I, it changed its name to Britannia Biscuits Co. (Achaya 1991:194)[1]. Till date it is one of the most dominant biscuit brands in India.

This debate went on till the middle of the 20th century, but simultaneously these new food items managed to secure their position within the Bengali fare. Therefore, the assimilative nature of Bengali consumption culture not only transformed it from time to time from within, but it also helped the Bengalis to cohabit with other cultures without any collision, though this process of incorporation did not always take the smoothest path. But throughout the process it always invited the fresh air of freedom and liberty within the culture which enabled some to break the shackles of caste practices and religious restrictions. In the 19th century this process of incorporation took a significant turn when new Western food items became an essential component of the idea of modernity that found a profound expression in the everyday diet of the Hindu middle class.

Among vegetables to be fried, brinjal and 'patal' (pointed gourd) were still not popular, though pumpkin was. Among fruits, mango, jackfruit, banana, berry, tamarind, pomegranate, myrobalan, sugarcane, fig and date were found aplenty. Pineapple and papaya were products imported by the Portuguese from South America. Consumption of mangoes was made popular among the elite by the Mughal officials who promoted its cultivation in North India. In Bengali we usually called mango as king of fruit which is consumed by all people irrespective of classes and mango trees are seen throughout West Bengal. Banana was a favorite within the Vaishnavas who partook of it along with milk and country sugar. Vaishnavas, being vegetarian, encouraged fruit consumption. Bengal was a fertile region, so even poor people had enough to eat. They consumed one meal every day which consisted of coarse rice, ghee, three types of vegetable dish, including 'pat shak' and 'ghonto' (mixed vegetable). The poor often immersed various vegetables and lemon in a water-filled pot through the night and consumed them the next day with salt. They also had the meat of hedgehog, mongoose and iguana. Another dish popular among them was 'muri' (puffed rice), mixed with 'ghee', onion and green chilies. Sour curd was consumed to neutralize the hot flavour of green chilies.

By the early 19th century the 'Rarh' region and the adjacent areas had developed a culinary pattern. The more affluent people partook of fine rice (processed with husk pedal), moong pulse with grated coconut, a variety of fish preparations like 'jhal and jhol', 'aachar' (pickle), 'dahi' and 'sandesh'. Famines with more limited means had rice, 'kalai dal' (pulses), various dishes of locally cultivated vegetables, 'posto' (poppy seed), 'ambal' (liquid pickle) and fish. The dishes prepared here were lightly spiced and gently tasty. Barddhaman is a large and ancient district of 'Rarh; which occupies the heartland of modern West Bengal. In

older times, Barddhaman Bhukti and the Barddhaman Raj used to embrace a broader area including much of Hooghly, Howrah and Medinipur. The traditional specialties of Barddhaman consists of rice, 'alai dal, 'posto bori' (dried pulse ball), 'kachu-kumror ghonto' (mixed vegetable dish cooked with pumpkin and arum), 'machher tok' (fish chutney). 'Posto- chingri' (prawn cooked with poppy seed juice) is a local delicacy. These items must have been in vogue from medieval times.

The general view of modern Bengali's regarding daily diet and health has undergone drastic changes in recent years. The modern Bengali adopted to a system of consumption of food which has several adverse effect on human health. Junk food have also taken a huge place in Bengal's kitchen, which consist of high calorie with hazardous chemical and also made up of processed or frozen food material which has a big adverse effect on human health.

Sadly, but all these cuisines are threatened in today's cosmopolitan society. Now Bengali's kitchen is full of pizza, pasta, noodles, 'momos', 'idli', chilli chicken, fried rice, 'dosha' 'biryani', 'kebab', soup etc. After industrial revolution farmers are using more and more pesticides in their farming which directly or indirectly gifting us various disease along with cancer. People are using color in food which is also very harmful and cancer causing. The first use of synthetic pesticides was introduced in the year 1940, consumption increased substantially over time. Pesticides are agrochemicals used in agricultural lands to protect plants and human from various diseases which may cause severe side effects that are threatening for human health. Pesticides have different distribution and persistence patterns in the environment, even if all of them are proliferated in some way through air, soil, and water.

Epidemiologic evidence on relationship between chemical pesticides and cancer have already been reviewed. In animal studies many pesticides are carcinogenic (e.g., Organochlorines, creosote and sulfallate) while others, (notably organo-chlororines, DDT, chlordane) are tumor promoters some contaminants in commercial pesticides formulations also may pose a carcinogenic risk. While others pesticides like Triazines is a class of pesticides that have been related to endocrine disrupting effects and reproductive toxicity, moreover there can be a possible stational relationship between Triazine and breast cancer. Another study revealed that Pyrethroid metabolite is related to DNA damages in human sperm. Journal Access to Cancer Causes and Control for the year 2017, pesticides residues found in fruits and vegetables and in animal feed which can end up in meat, poultry, fish and dairy products on top of any extra antibiotics or hormones.

**Add On:** Bengalis food culture always followed by social and religious customs along in consideration with climatic change and geographic condition. Among all the Bengali subcontinents Bengalis are always famous for their attraction on food. Normally people eat to live but Bengalis live just to eat varieties type of food. Normally in Bengal there are 6 different seasons (Summer, Rainy, Early Autumn, Late Autumn, Winter and Spring) with different festivals and most importantly Bengalis eat food according to season and in the name of rituals which in reality very helpful for their health. Not only that Bengalis prefer a special food called 'Jhalmuri' (made with

puffed rice with mustard oil, onion, spices, green chilies, pickle and nuts etc.) for 'adda' (a normal home gathering). Puffed rice is a very light food, with very little calorie which anyone can consume at any time. Summer season normally starts with the festival "Poila Baisakh" (1<sup>st</sup> day of Bengali calendar) and during this festival Bengalis used to eat 'Panta Vaat' (rice cooked in previous night and preserve it with salt and water for 12 hours and serve next day) which is full of sodium, potassium, iron with some other minerals. Different Bhorta (boiled potato, different dal with onion, red and green chilies with little amount of oil) and at the end 'Rosogolla' (sweet that made from chana). Now the most important question why Bengalis celebrate this festival with above types of food and the answer is in the scorching heat fried or heavy food which is very difficult to digest. Bengali eats this type of food to keep their stomach cool. 'Panta Vaat' and less oily dishes strengthen body at that season along with development of and anaemia ('panta vaat' contains iron). In total, Bengalis diet are very light and easily digestible and people can remain healthy during summer. Our ancient tribal (santal) everyday take 'panta vaat' and work for a long hour in the agricultural land in the scorching heat of sun throughout the day but till date they never face the problem of sodium, potassium level, anaemia and any other related diseases. In rainy season, because of humid weather our digestive system started slackening, Bengalis follow their diet chart accordingly. Bengalis used to eat Kichuri (a mixture of rice, pulses and spices along with vegetables) and different preparations of 'Ilish mach' (hilsa fish) and lots of fried food. Normally during rainy season people used to fall sick. So at that time 'Khichuri' which itself is a detoxified food tranquil the stomach and intestines which is perfect for the irritable bowel syndrome, a viral infection, diarrhea or loose motion. 'Khichuri' also can soothe our upset tummy when our immunity is weak during rainy season. Hilsa fish is full of essential fatty acids including Omega 3 fatty acid which are very helpful for lowering triglycerides, cholesterol that reduces the risk of coronary heart disease along with this it also provides high quality protein, vitamin A and D and so many minerals. In rainy season we eat lots of fried food to refresh our mind only. Bengali use to avoid leafy vegetables in rainy season because all the water bodies overflow and different types of impurities can be mixed up with that leafy vegetables. In early Autumn Bengalis biggest festival 'Durga pujo' takes place. In this season Bengali used to listen to their mind not the words of health. But during this festival season Bengalis use to prepare varieties of Nadu (coconut mixed up with jaggary or sugar) and 'Kucho Nimki' (after making a dough with flour, oil, spices and then deep fried in oil). Coconut contains protein, some essential minerals and a little amount of B vitamins and jaggary is like medicinal sugar when combined together creates magic for our health. 'Narkel nadu' (full of anti-oxidents) helps in reducing blood sugar along with enhancement of skin along with improvements of bone health and body metabolism. Coconut is rich in copper and iron which has a great contribution in the formation of red blood cells and selenium protects our cells for being an antioxidant. During puja we normally spend lots of time outside our home and as a result our lungs absorb a heavy amount of dust particle. Jaggary presents in the 'Nadu' helps in sweeping the mucus and dust particles from lungs otherwise it can cause breath disorder. Though 'nimki' is a fried food still different spices used in it makes the snack healthier at early autumn. And most importantly during early autumn we consume lots of pumpkin (as 'chachra', 'labra' etc) which is the most beneficial vegetable at that season. In late autumn Bengalis celebrate a festival called "Nabanno". Nabanno



literally means “New (‘nabo’) rice (‘anno’)” and this festival with celebrated with ‘Naban makha’ (newly harvested grinded rice mixed with milk, different fruits, sweet potato, jaggery and chopped zinger along with other spices for different variant) what we eat as a ritual but in reality this food has a great impact on our health too. During this season Bengali also eat ‘Saruchakli’ (fermented newly harvested rice and black gram with crepe like structure) and eat with jaggery which is very helpful in that season. During winter Bengalis use to celebrate “Poush Parbon or Makar Sankranti” with different religious rituals Bengali also accustomed with a very special food called ‘pitha’, ‘puli’, ‘patishapta’ (rice flour stuffed with coconut, ‘khoya’ and other so many variety stuffing depending on particular region) and eat with palm or date jaggery. Most importantly these ‘pitha puli’ which contains sweet potato, lentils and many other things is highly nutritious along with anti-oxidants that promote gut health with development of immunity. Those foods generally keep our body warm to treating cold and boosts immunity in chilly winter. Most importantly the role of date and palm jaggery which contains fiber that control irritable bowl syndrome and helps in digestion. Not only that the known sugar patient also can have these jaggery without having any health problems. These jaggeries stimulate the secretion of endorphins that give vaginal relaxation and provide relief from menstrual cramps. So jaggeries with which all pitha, puli, payesh are eaten is a rich sources of minerals and nutrients and take active part in digestion. Finally comes the most favorite season spring which brought lots of colorful flowers and the festival of colors, song and food called “Dol or Basant Utsav”. Irrespective of all caste and religion all Bengalis celebrate holi with lots of food and beverages. Normally Bengali eat ‘tiler nadu’ (sesame seed ‘ladoos’) which made up of sesame seed and jaggery is most beneficial for our health. Bengali also eats lots of cold and stale food like ‘sorbote’ (type of soft drink) during this festival which provides energy and keeps healthy. Another Bengali festival during spring is ‘Vasant Panchami’ and the next day Bengali celebrates ‘Shitala Sasthi’. On that day Bengali do not eat any hot food, all food prepared in the previous night and eat next day. Along with this a special dish is prepared called ‘Gota Sedhho’ which is made up of 5 types of lentils like cheak pea, black gram and other gram with baby potatoes, baby egg-plant and joint vegetables like paired beans, paired seem etc. which helps Bengalis to boosts their immunity. In reality probiotics and pathogenic microbes develop within the food throughout overnight fermentation with pathogenic bacteria in little amount gives immunization benefits for seasonal benefits along with prevention of Chicken pox.

So all total the cuisine Bengal is highly effected by its unique landscape and their own individual dishes for every season makes its own signature. Bengali foods are irresistible mouthwatering food which nobody can ignore. A real Bengali always prefer to eat with their hands irrespective of the surrounding ambience though earlier people were laughed at Bengali for their eating habits but presently it has been proved that there eating with hands is really a healthy (improve digestion, engages all senses, increases blood circulation, encourages limited eating and decrease the risk of Type-2 Diabetes and many more). Earlier Bengali eats only seasonal fruits and vegetables but now because of globalization they eat all fruits and vegetables in all season and as a result in the name of goodness of fruits and vegetables they are actually inviting diseases. The newly introduced food are



definitely increasing the economic market share by replacing old traditional food but in exchange the Bengalis are getting weak health. Bengali consumes turmeric powder with in any preparation of different vegetables and pulses in a daily basis. It has been proved from previous research work that consumption of turmeric powder (which contains curcumin) in daily diet is very healthy even it can prevent cancer also. Recently, some countries are interested in buying turmeric from India, that will boost up Indian economy. Tamarind which is easily available in India, Bengali uses it at the end of their meal. The polyphenols present within tamarind are full of anti-oxidant and anti-inflammatory characteristics that helps in preventing heart diseases, diabetes, lowering blood sugar, reducing body weight and fatty liver and even the risk of cancer. The great foody Bengalis from the vary ancient time were not willing to leave the meat bone and bone-marrow also. That practice is very funny and strange to the outside world. But in reality it has been proved bone contains huge amount of calcium and bone-marrow contains collagen (helps in improving joint function), conjugated linoleic acid, glycine and glucosamine which are helpful in decreasing inflammation better skin health.

**Suggestions and Recommendations:** Earlier there was no doctor but people can get relief from their diseases from various natural things which were easily available at their doorstep. The old people were able to see all things at their age of 75 to 80 and without any cataract operation. Cancer was not invented at that time because of their food habit and lifestyle. They used to cook their food in the earth metal which is very helpful in preserving all micronutrients available in the cooking food. As earlier days Bengali's can also replace biscuits by puffed rice and flattened rice which can add extra nutritional value in their daily diet. Earlier Bengalis used to eat meat on occasional basis which was a good practice because now a day Bengalis eat different meat on daily basis which is not at all desirable for maintaining good health. In ancient times Bengalis eat jaggery instead of refined sugar and through different research it has been proved that consumption of jiggery is much healthier than refined sugar. Another important determinant of health deterioration is happening because of refined iodized salt, earlier we used salt without chemical processing which was really a healthier one.

### **Desserts:**

According to some authors, in the earlier period Bengal was recognized as "Gauda Banga" because of its origin. They assumed that the name "Gauda Banga" originated from the term "Gur" or jaggery. Actually Bengali cuisine is always famous for its delicious sweets as desert. In ancient time sweets were mainly prepared from coconuts with gur or molasses. After the colonial annexation "channa" (a milk product) has been introduced in Bengali's sweet dishes. The eating habits of average Bengali have undergone some changes over the past 50 years. After the communication with Mughal and the Europeans from 18th century a noticeable changes took place in Bengali's kitchen. Bengal's consumption of eggs, mutton and chicken meat, variety of sea fishes, dairy products and plant produce has increased more than two fold in this time and the consumption of grains has decreased which is leading towards various dangerous diseases and different health problems. Traditionally the Bengali's

diet uses less processed ingredients and natural ingredients than western countries. But now a days, with our youngsters' western food such as pizza, pasta, burgers, fried chicken etc. are playing their part in bumping up the national average of fat and sugar with food allergies and various health problems. With growing urban culture Bengali's kitchen was losing their traditional and cultural uniqueness with growing diseases, which led in an inquisitive combination of culinary cultures developed in 18th century Bengal. So the only option for maintaining our cultural heritage and health is switched to the organically produced food just like ancient era. Organically produced food has that taste which can give us remembrance of our old culture and cuisine. So with the historic modification we can maintain our nature and natural resources with its cultural values and ethics. In modern days Bengal's kitchen are full with readymade food and spices also.

Basic nutrients, such as carbohydrate, protein and fat are the basics of all life activities. Rationally, the main aim of nutrition is to prevent and treat nutritional deficiencies but now a day's nutrition means diet with low fat and less cereals, easy to cook but tasty with high calorie. Nutrients are the nourishing substances in food that are essential for our growth, development and maintenance of body function but now a days, with this nutrients we are in taking huge quantity of pesticides and other harmful chemical which is the cause of so many diseases.

The cuisine of Bengal is as rich and distinct as the state itself. Traditionally, wisdom about processing of food, its preservation technique and their therapeutic effects has been established for much generation in Bengal. Bengali food especially different spices, seasonal vegetables, small pond's fish, mustard oil can deliver numerous biological functions through dietary components in human body. Bengali cuisine is very specific to season also which can prevent them from various seasonal problems. So the main objective is to prevent Bengal from losing their ancient kitchen and culture with maximum health benefits.

Bengali's culture is highly related to their eating habits. In ancient era Bengali's had a typical dine in culture where all family members used to sit together on the floor and ate with their hands. From various research works it has been proved that the culture was really healthier one and also helpful in digestion. Earlier the farmers of Bengal do not use pesticides in agricultural field to get rid of harmful insects. Rather they use fire far away from their agricultural field in the form of different occasion at different season which creates light and insects from the dark agricultural field attracted by the light and they jumped into the fire. As a result, there was no use of pesticides and they produced rice, pulses and vegetables without harmful pesticides. Bengalis are always special for their enriched cultural values and norms which are deeply associated with their healthy body and mind. There is a proverb "Bangalir baro mase tero Parbon" (in 12 months Bengali used to celebrate 13 festivals) i.e., Bengalis are always making themselves busy in celebrating different festivals for maintaining their inherited cultural decorum from their ancestors. Every Bengali celebration is ended up with individual unique dishes which are also necessary to eat at that particular time. So, Bengali cuisine not always tasty only but most of the time the dishes are healthier also and changes the ingredients and preparation according to the demand of the particular season.

**Declaration:**

- **Availability of data and materials**

The data was mainly collected from primary and secondary sources. The secondary sources of data rather the historical material are mainly based on different 'Kavya Grantha' (a type of mythological book) and various research articles along with different websites. We have collected a detailed primary data through an enlarged and qualitative questionnaire. All the primary data were collected from different age group of people residing in rural and urban places within West Bengal, India. As the collected data is based on past and present pattern of food and related health parameter so we could not set the questionnaire in any point scale. So, we are unable to established a direct correlation between Bengali cuisine and related health. No significant parameter has been found to which can prove the improvement or deterioration of health with consumption of food. So we have tried to establish the healthiness of ancient dishes and how it was compatible to our ancestors' health but it's really unfortunate that the present food habit is not compatible with health at all.

- **Competing interests**

The paper can generate a huge interest among our youngsters as well as different age group of people who are at the same time concerned about their health and well-maintained figure. Our research is mainly focusing on how people can maintain their figure and good health through the consumption of very common ancient daily diet which can give economic benefit irrespective of all classes. We also tried to focus that in the name of newly introduced different dietary ingredients and diet patterns (no carbs, gluten free, keto, vegan etc.) are making their market through some bloggers which is only generating huge money for some particular organizations. Though Bengalis are changing their diet pattern with a global influence (replacing mustard oil, ghee with canola, olive, vegetable oils) without having a valid proof but history proves itself that ancient Bengali diet was really healthy and compatible with season (from vegetable to fruits) which was mostly based on their work pattern.

- **Funding**

N/A

- **Authors' contributions**

In reality, with this research work for last three years, we have faced many difficulties for the survey of questionnaire. We have personally visited almost each and every remote villages of West Bengal for detailed personalized interview in search of history related to ancient Bengali cuisine and their mutable meditational habit.

- **Acknowledgements**

First of all, we want to acknowledge that supreme power or the almighty which is worshiped in different form and name in different religion.

Secondly, we want to acknowledge our parents for keeping patience in collecting data and contributing huge hours for the sake of each and every minute detailing of the paper.

## References

- 1) Achaya, K.T. 1991. The Food Industries of British India. New Delhi: Oxford University Press.
- 2) Anonymous. 1940. Banglai Bhraman. Kolkata: Eastern Railway Publication.
- 3) Banerjee, Asit kumar. 2010[1966]. Bangla Sahityer Sampurna Itibritta. Kolkata: Modern Book Agency.
- 4) Banerjee, Brajen and Sajani kanta Das, ed. 1943. Bharat chandra Granthaboli. Kolkata: Bangiya Sahitya Parishat.
- 5) Banerjee, Kali prasanna. 1908. Banglar Itihas: Nawabi Amal. Kolkata: Students Library.
- 6) Banerjee in his magisterial survey mentioned Iswar Gupta as the last noted Bengali poet of the old school. Modernity was never significantly evident in his outlook.
- 7) Banerji, Chitrita. 2005. Life and Food in Bengal. New Delhi: Penguin Books.
- 8) Basu, Pradip. 2012. 'Adarsha Paribarar Adarsha Randhanpranali', in Paribarik Probondha: Bangali Paribarar Sandarva Bichar. Kolkata: Gangchil.
- 9) Bhatia, Varuni. 2009. Devotional Traditions and National Culture: Recovering Gaudiya Vaishnavism in Colonial Bengal. New York: Columbia University.
- 10) Chakravarti, Mukundaram. 2011. Kabikankan-Chandi (Chandimangal), eds. Sri Kumar Bandyopadhyay and Viswapati Choudhury. Kolkata: University of Calcutta Press.
- 11) Chattopadhyay, Jogendranath. 2009. Smrite Sekal. Kolkata: Charyapad Publications.
- 12) Dutt, Madhusudan. 1999 [1860]. 'Ekei Ki Bole Sabhyata?' in Madhusudan Rachanabali. Calcutta: Tuli Kalam.
- 13) Habib, Irfan. 2014. The Agrarian System of Mughal India 1556-1707, revised edition. New Delhi: Oxford University Press.
- 14) Chakraborti, Alok Kumar. 1989. Maharaja Krishna chandra o Tatkalin Bangasamaj. Kolkata: Mitram.
- 15) Chandra, Manoranjan. 2004. Mallabhum Bishnupur. Kolkata: Dey's Publishers.
- 16) Ghosh, Baridbaran. N.d. 'Menu' in Sananda Magazine. Kolkata: Ananda Publishers.
- 17) Ghosh, Sudhangshu, ed. 2010. Manasamangal. Kolkata: Rajkrishna Pustakalaya.
- 18) Ghosh, Sudhangsuranjan, ed. 2003. Dharmamangal. Kolkata: Rajkrishna Pustakalaya.
- 19) Gupta, Pratul Chandra. 1986. Itihaser Golpo. Kolkata: Ananda Publishers.
- 20) Majumdar, Lila. 1979. Rannar Boi. Kolkata: Ananda.
- 21) Mitchell, Timothy, ed. 2000. Questions of Modernity

22)Sanyal, Hiteshranjan. 1971. 'Continuities of Social Mobility in Traditional and Modern Society in India: Two Case Studies of Caste Mobility in Bengal', Journal of Asian Studies 30.2: 315–39.

23)Swami Vivekananda. 1954. 'The East and the West', in The Complete Works of Swami Vivekananda. Almora: Advaita Ashram.

