



Traditional Indian Foods

Matthew N. O. Sadiku¹, Sudarshan R. Nelatury², Abayomi Ajayi-Majebi³, Sarhan M. Musa¹

¹Roy G. Perry College of Engineering, Prairie View A&M University, Prairie View, TX, USA

²School of Engineering and Engineering Technology, Pennsylvania State University, Erie, PA 16563-1701

³Department of Manufacturing Engineering, Central State University, P.O. Box 1004, Wilberforce, OH, USA
Email: sadiku@ieee.org; srm3@psu.edu; ajayi-majebi@centralstate.edu; smmusa@pvamu.edu

Abstract Traditional Indian foods are unique and different from rest of the world, not only in taste but also in cooking methods. They have been developed for many years and preparation varies across the nation. Traditional wisdom about preparing indigenous meals, its preservation techniques, and their therapeutic effects have been established for many generations in India. Indian cuisine is one of the most popular yet misunderstood cuisine in the world. It comes as no surprise that Indian cuisine is considered to be a food mecca. This paper is a primer on tasty Indian foods to eat for all occasions.

Keywords Food, Culture, Indian Staple Foods, India Foods, Occasions

Introduction

Food habits have played a major role even in the rise and fall of civilizations. Food is the main source of providing nutritional needs. Food presents a way to understand everyday Indian culture as well as the complexities of identity and interaction with other parts of the world. Food in India is an identity marker of caste, class, family, kinship, tribe affiliation, lineage, religiosity, ethnicity, and secular group identification. India tops the list of food countries that have mouthwatering, finger licking dishes. Indians are vegetarians because their meals do not include beef, considering that cows are sacred for them. Indian food includes Chai and Dal, which combines several spices, resulting in rich curries with a delicious, spicy pepper taste. Indian food is a great choice for those who like vegetarian dishes with lots of spices. A traditional northern Indian is mutton korma, which is made with mutton, yogurt, fried onions, and spices. Indian cuisine is a culmination of a history of successive imperial movements and syntheses, with contributions by the Portuguese, the Mughals, the Persians, and the British.

The population of India is roughly 1.38 billion, with more than 70% of the population living in rural or remote areas, and 70% of the population depend on agriculture. India shares a border with Pakistan, Bangladesh, Nepal, Bhutan, China, and has a close proximity to the island of Sri Lanka. The influences of these surrounding nations are keenly felt on India culture, especially when it comes to food. Historical phenomena such as invasions, commerce, immigration, and colonialism have played a role in introducing certain foods to India. India has several thousand castes and tribes, sixteen official languages and several hundred dialects, six major world religions (Hindus, Muslims, Sikhs, Jews, Christians, and Buddhists), and many ethnic and linguistic groups.



India has a long history of traditional medicine with Ayurveda being the most representative. Indian civilization is one of the oldest heritages of mankind. For over 2000 years most of the Indian population have used Ayurveda as their major healthcare system. About 70 percent of rural population in India depends on the traditional Ayurvedic medicines. The Ayurveda contains a wealth of knowledge on India traditional medicine. There is so much similarity in Ayurvedic dietetics and traditional foods that many of the traditional health foods in India can be called Ayurvedic foods. The concept of Ayurvedic cooking is based on the nutritive value of Indian food and cooking method [1,2].

Food Philosophy

Food is at the center of Indian culture; it feeds both the bodies and the spirit. The importance of food in Indian culture is based on traditional customs that defines the social norms, religious belief, economic status and gastronomic diversity of different food habits of India.

A child growing up forms a food habit when he is told several times that: “don’t go out on an empty stomach, do not talk while eating, do not share glasses, do not chomp...” These messages are good manners and can magically impact health. In olden days, it was considered a taboo or a bad manner to talk or converse while eating. The main reason behind it was probably the fear of choking on food [3].

In an age when there were no dining tables, people sat on floor while eating as practiced in India. Sitting on the floor cross legged while eating is typically a yogic posture called *Sukhasana* which helps digestion and boost circulation. Figure 1 shows both traditional eating posture and *Sukhasana* [3].

It is also customary for Indians to eat with hands, because they believe that food tastes better when eaten with hands in a hygienic way. Eating with your fingers helps the mind to connect with the food better and one tends to eat less and more mindfully.



Figure 1: Traditional eating posture and *Sukhasana* [3]



Traditional Indian Ingredients

Traditional Indian food is based on some ingredients that give it flavor and delicious taste. Traditional ingredients are extremely nutritious, being local and seasonal. As a rule, the North Indian diet relies on wheat, and rice is king in the South. Staple ingredients in Indian cooking include rice, tomatoes, potatoes, lentils, chickpeas, onions and yoghurt, and the most common spices used to flavor traditional Indian food include turmeric, cumin, coriander, mustard seeds, cardamom, chili, garlic, cloves, saffron, fennel, nutmeg, star anise, and fenugreek. A combination of these traditional ingredients is commonly used in preparing Indian delicious dishes. Some of them are discussed as follows [4-6]:

1. *Grains*: These are the primary staple food of India. Grains are a nutritionally rich product and deliver nutrients to the body. All grains have good calorific value, largely from starch and proteins. Barley is one of the oldest grains. Rice came in much later, but it quickly found a place of prominence. Grain-based traditional meals are shown in Figure 2 [2].
2. *Dried Pomegranate Seeds*: The ground seeds can be used in chutneys, soups, and gravies. These are high in antioxidants, rich in iron, potassium, folic acid, and Vitamins C and K.
3. *Finger Millet*: This is also known as *ragi*. This grain is gluten-free food, a rich source of carbohydrates. *Ragi* flour can be used to make porridge for breakfast, cookies or biscuits.
4. *Jackfruit Seeds*: The seeds are highly nutritious and contain minerals such as iron, zinc, calcium and magnesium. When cooked, the seeds are similar to chestnuts and make for a healthy snack. Jackfruit seed chutney is prepared by pounding boiled jackfruit seeds and mixing with chili, onion, garlic, and grated coconut.
5. *Lotus Seeds*: The seeds can be dry-roasted and eaten as a snack or added to vegetable curries. They are low in calories, fat and sodium but high in calcium, potassium and magnesium.
6. *Mung Beans*: The carbohydrates in mung beans seem to be more easily digested. They are made into a soup with garlic, ginger, and spices to be enjoyed with rice, or served sprouted as a salad with chopped veggies.
7. *Kidney Beans*: Consuming these red beans has been linked to a lower incidence of chronic diseases such diabetes, cancer, obesity, and coronary heart disease. One can toss kidney beans into salads, add them to soup and chili.
8. *Lentils*: These disc-shaped seeds come in a variety of colors and are a great source of plant-based protein. They are not actually lentils, but beans that are closely related to mung beans. Lentils are typically prepared with spices and served with rice or roti.
9. *Ginger*: This is known for its anti-inflammatory and antioxidant effects. It is a low-calorie way to add flavor to all kinds of foods. It is frequently used in savory dishes as well as sweet ones.
10. *Cumin*: Cumin seeds are tiny, brown seeds. This spice has been studied as a weight loss aid. Cumin is used in Indian cuisine as seeds or in powdered form.
11. *Cinnamon*: This spice is really the ground bark of a certain tree.
12. *Bitter Melon*: This is an Asian vegetable that has a slightly bitter taste. Like those other vegetables, it is low in calories and delivers some fiber.
13. *Mustard seeds*: The seeds contain sulphur compounds that give mustard its sharp flavor. They can be in three colors: yellow, black, and brown. Black mustard seeds and fresh curry leaves are perfect for flavoring potatoes or chickpeas.
14. *Mustard oil*: This comes from pressed mustard seeds and is a common frying oil.
15. *Yogurt*: This is an essential Indian ingredient that can be swirled into dishes. You can use it as a main ingredient in condiments like raita and drinks like lassi.
16. *Banana*: This is a delicious fruit used in India mostly as prasada (spiritual food). It is used in making banana stem juice. The different parts of banana plant used are fruit, flower, and stem. Ripe banana fruit is used for treating gastric problem, since it is alkaline in nature. Banana fruits are rich in iron,



hence it can be recommended to women who are suffering from anemia. Banana leaves are traditionally used for serving other foods in south India.

17. *Mango*: This is a rich source of antioxidants. Mangiferin is a potential antioxidant found in mango. It possesses iron-chelating property. The functional properties of mango help in curing degenerative diseases. It is used in preparing Mango pachadi, which consists of mixture of various tastes such as sweet, salty, bitter, hot and astringent along with the tangy sourness of green mangoes.
18. *Papaya*: It is used in traditional medicine system and in making papaya salad. All the parts of the tree are used in treating one disease or the other. Latex papaya tree is used to relieve dyspepsia, ripe fruits are used in treating chronic diarrhea, unripen fruits are diuretic in nature. Papaya seed juices are used in treatment of bleeding piles and enlarged liver, and young leaf paste is used to treat jaundice.
19. *Cardamom*: This is a versatile spice with a warm, sweet flavor. Both green and black cardamom have a strong fragrance and are commonly used in Indian food.
20. *Coriander*: These dried berries have a sweet aromatic flavor that bears no similarity to the herb that produces them. Fresh coriander is often used for garnish on a wide variety of popular Indian dishes.
21. *Turmeric*: This is a bright yellow spice that comes from a dried root. It gives curry powder its hallmark color and has an earthy, mustardy flavor.
22. *Garlic*: a strong aromatic related to onions with a sharp spiciness and sulfuric undertones.



Idli



Ambali



Ragi huri hittu



Enduri pitha



Selroti

Figure 2: Grain-based traditional meals [2]

Different Indian Dishes

Everyday homecooked Indian meal is nutritionally balanced and kept simple. Traditional Indian dishes vary widely between North Indian and South. The following Indian dishes are popular and tasty [7]:

- *Aloo gobi*. Crisp golden potatoes and cauliflower.
- *Butter chicken*. Learn how to make the perfect Indian butter chicken with this recipe.



- *Chana masala*. Chickpea stew.
- *Palak paneer*. Spinach curry with fresh cheese.
- *Chicken tikka masala*. Chicken in a creamy masala sauce.
- *Doughy, butter-brushed naan*. The popular Indian baked flatbread.
- *Crisp papadum*. A very thin, North Indian flatbread with a satisfying shatter that's fully dried before getting a quick dunk in hot oil until blistered and golden.
- *Fish curry*. Try this easy and quick South Indian fish curry recipe at home. (This curry from Goa is traditionally served with idli steamed rice cakes or dosa lentil and rice crepes.)
- *Lamb vindaloo*. A quick and easy, spicy curry featuring meat marinated in a tangy vinegar sauce.
- *Dal makhani*. A stew made with whole black or yellow lentils.
- *Pakora*. A fried snack typically featuring cauliflower or potato coated in a light batter.
- *Kofta*. Indian meatballs usually made with minced lamb or pork, onions, and spices.
- *Korma*. A thick, savory curry consisting of meat or vegetables braised with yogurt, cream, and spices.
- *Biryani*. A meat-and-rice mixed dish that is a popular staple food in Kashmiri cuisine.
- *Kebab*. Popular in Punjabi cuisine.

Figure 3 show how Indian foods are ranked [8]. Information for how to prepare each of the meals above or below is online and social media. The main differences are largely divided into South Indian and North Indian cuisine. A lot of the northern regions of India are vegetarian. Southern India, with its Hindu traditions, provides us with vegetable accompaniments and main dishes. It is not possible to describe the breadth and depth of Indian cuisine. We will provide information only on some of them [2,9-13]:



Figure 3: Indian foods are ranked [8]



1. *Achaar* is the staple pickle of India. Made from either a fruit or a vegetable, achaar brightens up anything from rice to yogurt. The classic is a spicy mango achaar, which varies in heat and spice from state to state but brings a reliable sweet-sour profile.
2. *Chaats*: Chaat refers to an entire category of Indian food popular throughout the country in street stalls and roadside stands. Chaats are savoury snacks, serving as Indian street food. The popular snacks include kachori, pani puri, bhel puri, and masala puri, with a base of puffed rice and peas, vegetables and spices. Once you try chaats, you will keep going back for more. Some Indian chaats are displayed in Figure 4 [9].
3. *Ambali*: This is a finger millet-based product of south India. It is prepared by mixing of finger millet flour with water to make a thick batter and followed by cooking and fermentation. It is very cold in nature and consists of sufficient amount of calcium. It is a healthy drink for the elderly.
4. *Dhokla*: This is indigenous probiotic breakfast food found mainly in Gujarat state. It is a vegetarian dish made from a fermented batter of rice and split chickpeas. Dhokla is prepared from the fermentation of Bengal gram and rice. It can be a good food item in the diet menu of diabetic patients.
5. *Monkey jack*: This is an underutilized edible fruit found in Central India. The fruit has medicinal properties and is used to make powder, juice, and papads (crispy tortilla). It is a good source of iron and other minerals. Monkey jack juice is prepared from the pulp of fruit. Sugar, cardamom, and black pepper are added to the filtered juice.
6. *Jadoh*: This is red hill rice cooked with pork pieces. Being a Khasi cuisine, it takes hours to make. It is an amazing dish enjoyed by many. It is shown in Figure 5 [10].
7. *Momo*: This is a type of South Asian dumpling, served with spicy sauces, popular across the Indian subcontinent. This is a delicacy loved by almost all.
8. *Idli*: This is a traditional, savory Indian cake that is a popular breakfast item in many South Indian households and throughout the country. It is made with a batter consisting of fermented lentils and rice, which is then steamed. These savory cakes are commonly served hot and consumed on their own, dipped into sambar or chutneys, or seasoned with a range of spices. It is shown in Figure 6 [11].
9. *Paratha*: This is a flaky, layered, golden-brown Indian bread, which is typically served for breakfast. It consists of whole wheat flour that is baked in ghee, Indian clarified butter, and comes in circular, triangular, square, or hexagonal shapes. Parathas are often stuffed with ingredients such as boiled potatoes, cauliflower, garlic, ginger, chili, paneer, or radish. They are sometimes accompanied by pickles, yogurt, homemade chutneys, and occasionally served as a side to meat and vegetable curries. Paratha is shown in Figure 7 [11].
10. *Dosa*: This is a fermented dish like idli mainly found in the south Indian region. It is a highly seasoned pancake, which contains rice and black gram as primary ingredients. Finger millet and horse gram can be used as primary ingredients in order to improve the nutritional quality. Sometimes *dosas* are stuffed with veggies and eaten as snacks.
11. *Naan*: This is the most widely recognized Indian bread. It might be one of the most popular Indian dishes. This unleavened flatbread can be baked or fried and frequently appears as an accompaniment at Indian restaurants around the world. The signature flatbread is served plain or with butter, garlic and/or chilies.
12. *Khichdi*: This is Indian rice with lentils. If India had a national food, khichdi would probably be it. This meal of lentils, rice or oats, and mild spices is one of the first solid foods that Indian infants eat. There is no denying that it is something that is consumed in one form or another across India. To many adults, it is viewed as the ultimate comfort food. The rice dish is shown in Figure 8 [12].
13. *Samosas*: Street food is central to Indian food culture, with each region, state and city having its own delicacies and local favorites. Samosas are probably the most popular street food in India. They are fried or baked pastry pockets with a savory filling such as spiced potatoes, onions and peas. The



samosa has become an iconic Indian food recognized all around the world. Samosas are shown in Figure 9 [13].



Figure 4: Some Indian Chaats [9].



Figure 5: Jadoh [10]



Figure 6: Idli [11]



Figure 7: Paratha, the Indian bread [11]



Figure 8: Khichdi, the Indian rice dish [12].



Figure 9: Samosas [13]

Applications

Food is applied as medicine to the body and consumed in many occasions. We will consider three areas of applications of India food.



- *Wedding Food:* The wedding day is regarded as a time of happiness. Indian weddings are a vibrant, colored celebration of love and can last for days. Food is one of the most important components of any wedding, and Indian food makes for one of the best wedding foods in the world. At an Indian wedding, you can expect to find an array of courses on your Indian wedding food menu. Traditionally all of the below will be served [14,15]:
 - Starters
 - Salad
 - Soups
 - Snacks
 - Accompaniments
 - Curries
 - Chapati/Flat Bread
 - Raita
 - Desserts

Hotels make a killing on over ordering to be safe during wedding season

- *Food for Curing:* Traditional Indian food practices evolved over thousands of years and provide a holistic approach. With increasing commercialization and availability of hyperpalatable foods with high glycemic index, families struggle to ensure nutritious, yet attractive meals. Hundreds of indigenous foods like plants, animals, insects, and fungi are known to have food value. Diabetes is a major health issue in developing countries, particularly in India. An Indian diet is traditionally high in oils and carbohydrates which make management of diabetes challenging. Ayurveda deals with the diet plan, since its main principles says 'heal/cure yourself through proper diet and exercise'. Major dietary factors that influence diabetes mellitus are eating excess sugary, salty, or acidic foods. Some animal flesh and fresh grains are also responsible dietary factors for diabetes. The Ayurvedic system has different diet plans for diabetic patients. Foods that possess astringent or bitter taste help in reducing diabetic effect. Children and adolescents with diabetes need the same amount of protein as their peers without diabetes. Milk, yogurt, buttermilk, and paneer are excellent options for meal planning in diabetes, particularly type 1 diabetes [2,16].
- *Weaning foods:* Infants are more vulnerable due to the restricted number of available foods. When a child reaches age 4–6 months, breast milk alone is no longer sufficient to meet the nutritional needs. Weaning foods are the first semisolid foods given to children. The foods are generally mashed and malted and given as gruels. The diet for infants should contain sprouted or soaked cereals, legumes and fruits with low fiber.

Benefits

Indian traditional foods are regarded as *functional foods* because of the presence of functional components such as body-healing chemicals, antioxidants, dietary fibers, and probiotics which help in providing medicinal benefits and have healing properties that have been used for several years in the nation. For example, turmeric, an ancient spice, that is used in most Indian food is good for inflammation, digestion, and heart diseases. Other benefits of traditional Indian food include [17]:

- Traditional Indian food contains fewer calories.
- Supports immunity,
- Has less saturated fat in and good for the hearts.
- Variety in Indian cooking oil has a great benefit on health.
- Uses of seasonal and local vegetables and fruits also promote good health and better immunity.



Challenges

Through the processes of colonization and modernization, India have somewhat lost track of the real meaning of their traditional Indian food. The country has evolved with the western food and forgotten the goodness of their traditional food. Some people now complain that Indian foods has high cholesterol, high sugar, and carbohydrate. Westernization of the country has negatively affected their food system and brought infectious diseases and created a lot of health challenges. Embracing Western food culture has greatly affected traditional Indian recipes. The mess caused by a shift in eating habits has alarmed Indians and now they are taking our steps towards traditional Indian food [17].

Today, faster cooking methods have become more popular due to convenience. This does not help the children benefit from the nutritive and nourishing effect of traditional ingredients. It is needless to say that eating a homecooked Indian meal is different to what is served at restaurants. Foods offered at restaurants or during special occasions are specially made to entice and satisfy our occasional craving for popular, not necessarily healthy meals. The general rule of thumb for a healthy diet is food with a good balance of nutrients, vitamins, proteins, and carbs. While India has a soft spot for sweets, Indian food is relatively healthy and vegetable-forward.

These are some preconceived Indian food characteristics or misconception about Indian food and culture. These include the following [18]:

- Misconception 1 – Indian food is oily and fatty
- Misconception 2 – Indian food is spicy and rich
- Misconception 3 – Indian food is hot
- Misconception 4 – Indian Food is heavy and not healthy if eaten daily
- Misconception 5 – Eating Indian food is not the best while on a diet or for losing weight

These misconception have been challenged and proved untrue [18].

Eating by using hands and sitting on the floor with crossed legs was the customary method in India. See Figure 1. Many individuals find eating with hands unhygienic, primitive, and nauseating. However, eating food with hands is associated with not just the body but also the psyche and soul. Today, the Indian tradition of eating with hands is diminishing. Many Indian families, the act of eating with hands has been substituted with the use of cutlery such as spoons, knives, or forks, depending on the dish [19].

Conclusion

India is one of the oldest uninterrupted civilizations with diverse religions, cultures, traditions, socioeconomic strata, and agricultural practices living in harmony for millennia. India has the highest number of vegetarians in the world. Food in India has also been influenced by various civilizations and surrounding nations. Indian food is some of the most popular and most widely eaten cuisines in the world. Indian cuisine consists of a diverse range of curries, rice dishes, meats, vegetables, and breads, all flavored with a wide range of spices. Indian foods of India are better known for their spiciness. Popularization, richness, diversity, and unique goeography of India foods have strongly influenced other countries.

Sacred with a prosperous and diverse cultural heritage, India is known as the land of condiments and spices used for preparing foods throughout the world. More and more Indians today are global citizens who embrace global trends and adapt [20]. More information about traditional Indian food can be found in the books in [21-32] and the following related journals:

- *Nutritients*
- *Journal of Ethnic Foods*

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About the Authors

Matthew N. O. Sadiku is a professor emeritus in the Department of Electrical and Computer Engineering at Prairie View A&M University, Prairie View, Texas. He is the author of several books and papers. His areas of research interest include computational electromagnetics and computer networks. He is a Life Fellow of IEEE.

Sudarshan R. Nelatury is an associate professor at Penn State University, The Behrend College, Erie, Pennsylvania. His teaching and research interests lie in electromagnetics and signal processing.

Abayomi Ajayi-Majebi is a professor in the Department of Manufacturing Engineering at Central State University in Wilberforce, Ohio. In 2015 he was honored by the White House as a Champion of Change for his significant contributions to the engineering education of minority students. He is a senior member of both the Society of Manufacturing Engineers and the American Society for Quality.

Sarhan M. Musa is a professor in the Department Electrical and Computer Engineering at Prairie View A&M University, Texas. He has been the director of Prairie View Networking Academy, Texas, since 2004. He is an LTD Sprint and Boeing Welliver Fellow. His areas of research interest include computational electromagnetics and computer networks.

