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TRADITIONAL FOODS OF INDIA

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History

As a land that has experienced extensive immigration and intermingling through many millennia, India's cuisine has benefited from numerous food influences. The diverse climate in the region, ranging from deep tropical to alpine, has also helped considerably broaden the set of ingredients readily available to the many schools of cookery in India. In many cases, food has become a marker of religious and social identity, with varying taboos and preferences (for instance, a segment of the Jain population will not consume any roots or subterranean vegetables). One strong influence over Indian foods is the longstanding vegetarianism within sections of India's Hindu, Buddhist and Jain communities. People who follow a strict vegetarian diet make up 20–42% of the population in India, while less than 30% are regular meat-eaters.

Around 7000 BC, sesame, eggplant, and humped cattle had been domesticated in the Indus Valley. By 3000 BC, turmeric, cardamom, black pepper and mustard were harvested in India. Many recipes first emerged during the initial Vedic period, when India was still heavily forested and agriculture was complemented with game hunting and forest produce. In Vedic times, a normal diet consisted of fruit, vegetables, meat, grain, dairy products and honey. Over time, some segments of the population embraced vegetarianism, due to ancient Hindu philosophy of ahimsa. This practice gained more popularity following the advent of Buddhism and a cooperative climate where variety of fruits, vegetables, and grains could easily be grown throughout the year. A food classification system that categorised any item as saatvic, raajsic or taamsic developed in Ayurveda. Each was deemed to have a powerful effect on the body and the mind

Later, invasions from Central Asia, Arabia, the Mughal empire, and Persia, and others had a deep and fundamental effect on Indian cooking. Influence from traders such as the Arab and Portuguese diversified sub continental tastes and meals. As with other cuisines, Indian cuisine has absorbed the new-world vegetables such as tomato, chilli, and potato, as staples. These are actually relatively recent additions.

Islamic rule introduced rich gravies, pilafs and non-vegetarian fare such as kebabs, resulting in Mughlai cuisine (Mughal in origin), as well as such fruits as apricots, melons, peaches, and plums. The Mughals were great patrons of cooking. Lavish dishes were prepared during the reigns of Jahangir and Shah Jahan. The Nizams of Hyderabad state

meanwhile developed and perfected their own style of cooking with the most notable dish being the Biryani. During this period the Portuguese and British introduced foods from the New World such as potatoes, tomatoes, squash, and chilies as well as cooking techniques like baking.

Throughout history, India's borders have seen the passage of many in search of its distinctly aromatic spices. From cardamom to turmeric, the spices of India have led to the creation of one of the world's most flavourful cuisines. As a nation of twenty-eight states, distinct regional cuisines showcasing seasonal ingredients and unique cooking techniques can be found from the wheat-bearing



north to the rice-laden south. Each section boasts particular culinary preference shaped by agricultural, historical and religious influences.

INTRODUCTION

India is unique in its own way. It is not confined to one culture or one language, but has several cultures flowing through its vast lands and many languages are spoken. It is multi-cultural and multi-lingual unit, encompassing people from various social and ethnic

backgrounds. Citizens of India dress up differently, have different cuisine and their social and religious pursuits vary. Indian cuisine varies from region to region. Traditionally, some states in India have their own unique dishes, which they often prepare during religious and social gatherings.



The many similarities between the culinary regions of India are highlighted with an exquisite use of spices and flavourings. These range from cardamom, cumin, cloves, fennel seeds and garlic to ginger, chilles, fenugreek, saffron and turmic. Spice mixtures or masalas are a crucial element of Indian cuisine. Whether fresh or dried, masalas make use of local ingredients and are prepared daily along with grains, pulses and vegetables.

While meat, poultry, fish and seafood dishes are offered throughout India, most vegetarian specialities are found in the central and southern regions. For an added dimension of flavor, a variety of fruits are served fresh or pickled, such as chutney and relish. Dairy products, such as clarified butter (ghee), cheese (paneer), yogurt, milk and buttermilk (moru) are used as ingredients and condiments. Raita is popular chilled yogurt condiment garnished with chopped fruit or vegetables and spices.

Dal preparations (dried legumes and pulses) are at the centre of Indian meals. When combined with grains, they provide an inexpensive source of essential protein. Dals are prepared whole and pureed and are generally



served with vegetables and meat, where accepted. In the northern regions, thick and hearty stew-like dals are eaten with bread, while the thinner preparations of the south are best suited for rice. Channa dal or gram lentils are the most widely grown dal in India. Used both as protein and starch, garbanzos and lentils supply the base for breads, crepes and thickeners for curries. Other types of dals commonly eaten include peas, kidney beans, mung beans and split peas.

Served at nearly every meal, vegetables are one of India's most significant ingredients. India's perfected vegetable cookery offers rich and flavorful dishes, ranging from appetizers and side dishes to entrees and fried, roasted, braised, sautéed, pureed and stuffed. Dairy products, fruits, nuts, spices and seasonings are used to embellish greens (palak), eggplant, gourds, roots and squash while caramelized onions and tomatoes provide the foundation for many sauces and stews. Cauliflower and potatoes (alu gobi), peas and potatoes



(alu matter), peas and cheese (matter paneer), and spinach and cheese (saag paneer) are popular vegetable combinations.

From bread to rice based dishes, grains and starches are present at every meal as well, commonly served alongside curries, meats, seafood, dals, vegetables and condiments. In the

northern states, bread is primarily made of wheat flour. The central and southern areas use flour made from ground lentils, garbanzos, mung beans, corn or rice.

There are several types of rice grown and eaten in India, from long-grains and medium-grain to glutinous and wild. While basmathi is generally reserved for special occasional, plain boiled rice is served with everyday meals, especially in the southern areas. One- pot rice dishes, such as biryani, a combination of basmathi rice, meat or seafood, vegetables and expensive spices, nuts, fruits and meat, seafood or yogurt are oftentimes prepared for celebrations and religious festivals.

Foods Consumed in Different Regions of India

Northern Region and Western region

Meals in this region consist mostly of chapattis (rotis) accompanied Dal (pulses), vegetables and curds (Yoghurt). Rice is also taken but in lesser quantity. Side dishes consist of chutney (preserves) as well as achar (pickles). There are the Mughlai and Kashmiri cuisines, which represent the Central Asian



influence. People from this region also consume a lot of milk based sweets. In the north, breakfast often consists of Paranthas rolled (chapattis made of ghee) and puris (small chapatis



fried in oil). Maharashtrians love eating fish and meat. Fish is often stuffed or fried lightly. Meat, on the other hand is braised and spiced up with sour and sweet ingredients. Many Punjabis also eat meat. They have lamb and chicken dishes laced with spicy mustard, sweet or onion cream sauces. They also have sweet lassi (buttermilk) and fresh cheese.

Southern region

Mostly rice is consumed and most of the dishes are made up of rice. The consumption of rice is heavy along with vegetables and dal as well as chutney. For breakfast they have Idlis (steamed rice cakes) and Dosas (a type of pancake), which are made of rice and dal. Upma (a type of porridge) which is also rice based, is also very popular. Sambar (type of liquid soup) is consumed with most of the breakfast



items. Coconut is consumed a lot. It is used in chutneys as well as in curries in Kerala. The staple food of south is rice.

Eastern region

In West Bengal fish is consumed a lot. It is the staple food. Fish and rice is very popular. Sweets are also consumed in plenty. The fish is sauted in yoghurt and marinated in spices, which consist of aniseeds, cumin seeds, mustard, black cumin seed and fenugreek. Mustard oil is used. Most of the sweets are cheese or milk based such as rasgolla, gulab jamun



and sondesh. Bengali sweets are quite often served with sticky syrup which is sweet.

Desert areas



In Rajasthan and Gujarat plenty of achar and a variety of dals are consumed as not many vegetables are available. In Gujarat food is generally vegetarian. The staple grain is millet, wheat being secondary. Other stuff consumed are sesame, peanuts and several vegetables. Pulses are very essential as a source of protein for the Gujaratis, whether taken as a side dish or as soup known as Dal.

"Kichdi" is also very popular, which consists of mild rice and lentils.

Snacks

A number of snacks are consumed in various regions such as samosas, vadas, pakodas, chiwada etc.

Drinks

Coconut milk, lassi (buttermilk), nimbu pani (lemonade) coffee and tea are very popular.

Flaked or beaten rice such as "poha, avalakki" is also a very popular traditional product consumed either as snack after toasting or frying and spicing or after soaking in water and seasoning with spices and vegetables to make a breakfast item (cereal). Beaten rice is widely consumed in western and southern parts of India.

There are many traditional sweets prepared from grains, which are commonly consumed as snacks besides biscuits and cookies. These include candies (*chikki,gajjak*,etc.) which are prepared from puffed or expanded rice or Bengal gram, roasted peanuts and jaggery. Sweets like



puran poli, laddu, jilebi, boondi, jhangri, Mysore pak, besan burfi, fimi, chiroti, sohan papri, halws, shrikhand etc., are some of the important and commonly consumed traditional sweet preparations.

Indian dishes are very popular in abroad. Several restaurants in the West offer Indian cuisine. Generally, India cuisine is considered to be spicy, but the sweets can be very tasty to eat.

Foods like milk based sweets, snacks (*idli*, *vada*, *samosas* etc) have become an integral part of Indian culture. These traditional foods have already gained international recognition. Indians



have carried their culinary practices wherever they immigrated and as a result, we have Indian cuisine catering to the palate of most of the people worldwide today. In India, these foods are ubiquitous. They are available in all places, right from railway stations to supermarkets in urban areas and also in village markets. Traditional foods play a vital role in many religious festivals. Some selected foods are exclusively made for festivals and also some of these foods, especially sweets like *laddu*, *kheer*, *halwa*, *adhirasam* are prepared for special offerings in temples.

Eating Styles in India

Eating styles vary according to location, religious affiliation, and dininig occasion. The type of event, be it an everyday meal or a large feast involving many peoples, greatly affects the style of services and the number of dishes served.

Traditionally, women are responsible for preparing and serving meals. It is customary for the



men and guests to receive their first, followed by the children and women. In India, presenting food to family and guest is considered both a pleasure and a privilege.

A typical meal includes a staple preparation (rice, bread or both), dal, vegetables, curry, side dishes and condiments such as poppadums, raitas and relish. Everything is served at the same time on individual serving trays known as thalis. Thalis are ideal for daily meals and small gatherings, but for larger celebrations, banana leaves and earthenware bowls are commonly used and thrown away after the meal. Each tray, or banana leaf, holds a portion of rice and/or bread and several small bowls of each dish. Because most people eat with the fingers of their right, it is consisted unclean or impure to share food amongst individual thalis.

At the end of the meal, diners are presented with a bowl of water to wash their hands and an assortment of ingredients to make paan. Commonly chewed after meals as a breath freshener and digestive aid, paan consists of betel leaves, betel nuts and lime paste in its basic form.

Traditional Equipments used for Cooking

Chakki

Type of mill used for grinding grains and spices. It is made of two stones disks stacked on top of each other. Grains or spices are poured into holes in the center of the top stone. A wooden handle is turned, causing the top stone to move and grind ingredients into flour or powder.

Chula

Square hearth or stove fueled with charcoal, dried cow-dung cakes, or firewood.



Degchis

Silver - lined brass saucepans. They are without handles and are available in different

sizes and depths.



Earthenware pots

Used for specific dishes that require long cooking times with low, even heat.

Karchi

Long-handles iron ladle

Karhai (or kadhai)

Pan used for deep frying. Generally made of cast iron, it resembles a deep and narrow wok. Karhais lend a smoky flavour to foods.

Kodai

Handle free frying pan.

Mortar and pestle

Used for grinding spices.

Tambakhash

Long - handled flat iron disk that is often perforated. It is used for frying, stirring and removing ingredients from hot oil.



Tandoor

Barrel - shaped open clay oven fueled with charcoal. Tandoors are designed to spread heat evenly with temperatures ranging from 700°C to 800° F/371° to 427°C. Ovens come in several sizes from small clay and iron domestic varieties to large commercial styles made of bricks or iron.

Tava

Heavy iron pan used for cooking some types of flatbreads.

Thali

Round and shallow individual serving trays made of stainless steel or brass for everyday eating and silver for special occasions.



Changes in consumption of Traditional Foods

Traditional foods have started entering into the market in a new 'avatar' now. With long shelf-life and new packing techniques, the idli, vada and gulab jamun mixes have adorned the shopping malls today.

There has been a drastic change in the eating habits of the Indians due to the transition in their lifestyles. In the last few decades, both developed and developing countries have been experiencing many changes in their ways of living which has led to an increased demand for processed foods.

A Food which undergoes processing, adding value to conventional and innovative basic forms through various permutations and combinations of providing protection, preservation, packaging, convenience, transportation and disposability, is known as a processed food or formulated foods. Even in developing countries like India, an entirely new range of processed foods have flooded the markets like never before. The spurt of activity in processed foods has been brought about primarily due to need for convenience demanded by changing lifestyles.

There is a vast difference between the consumer of yesteryears and the new-age consumer and this change is increasing presumably with rapid urbanization and varied sociocultural changes. There has been a drastic change in the attitudes of women too. They prefer to spend less time in the kitchen today and more on leisure. The habit of eating out, women taking full-time jobs, weakening of family ties, influence of media, increased difficulties and expenses involved in obtaining domestic packaged, pre-cooked food which is easy to cook, handle and store.

It has been reported that the armed forces are the single largest users of convenience foods (about 40% of the convenience foods produced in India are consumed by the armed forces). Microbiological specifications have been laid down for products like precooked

dehydrated *pulav*, *kichadi*, *upma*, *halwa*, *chapattis*, *chikkis* and omlette mix (ready-to-cook).

All foods except *chapathi* and *chikki* are ready-to-cook and hence get heat treatment prior to consumption. For eg., Defense Food Research



Laboratory (DFRL), Mysore has developed a technology by which *chapatis* can be stored for more than six months. Other products, like instant rice, *pulav*, *khichdi*, *halwa*, etc., have been mainly developed for armed forces to provide greater efficiency and convenience when they are sent to the field.

Traditional Foods – Modern Functions

Traditional foods enjoy immense popularity owing to certain distinct properties. They augment food security, generate employment, improve nutritional status and add variety to dietary regimen. They are also endowed with several medicinal benefits.

Food Security

There are several options for preserving food including drying, freezing, canning and pickling. However, many of these are inappropriate for use at small-scale level in developing countries. For instance, the canning of vegetables at the small-scale level has serious food safety implications and freezing of foods is not economically viable. The technologies used to produce traditional food products have been employed for generations to preserve food for consumption at a later date and to improve food security.

Income and Employment

Traditional food products are found to be an important source of income and employment for millions of people around the world particularly the vulnerable and marginalized.

Nutritional Status

Optimum health and nutrition of individuals is dependent upon a regular supply of food and intake of balanced diet. When diets are sub-optimal, the individual's capacity to work with optimum efficiency is greatly reduced. The most vulnerable groups are women, children and infants. Non-availability of food, dietary restrictions and taboos, misconceptions and limited time available for feeding or eating aggravate the poor nutritional status. Traditional foods being rich sources of almost all nutrients help in improving the nutritional status of people to a larger extent.

'Spicy' not 'bland'

Many traditional food products have strong flavours, which can enhance a dull, bland and starchy diet. Pickles and *chutneys* are used to enhance the overall flavour of the meal. Pickles are one of the most important commodities among traditional food products exported from India. Like *papad*, it is an export earner. Addition of blended Indian spice powders to western style soups would certainly enhance its taste.

Medicinal Benefits

Several traditional foods have been endowed with different kinds of medicinal benefits. Foods are believed to contain 'hot' and 'cold' properties. They are also classified



as *Tamasic*, *Sattivika* and *Rajasic* foods. According to Bhagwad Gita, "tamasic" foods are cold, stale and highly spiced, rendering the consumer dull and slothful. Pork, beef, non-scaly fish and strong brews are some examples. "*Sattivika*" foods are savoury, nutritive and agreeable, conducive to serenity and spirituality. Examples of theses foods are milk and milk products, jaggery, honey, fruits, goat and sheep meat, chicken, eggs and wine. Rajasic foods

are bitter, sour, salty, pungent, dry and burning; they stimulate a person and make him restless. People believed that eating foods, which clashed with any ingrained temperament or seasonal contraindications, would result in imbalances and thereby ill health and disease.

In South India, 'ugadi pachadi' consisting of nee, mango, jaggery giving five different tastes, is consumed on traditional 'New years' day. It is believed that these different tastes provide different experiences one has to face in life. It is commonly believed that 'ugadi pachadi' has a laxative effect while idli serves



as an antacie, 'sunniundalu' (made of barley, rice, jowar) is curative for urinary tract infection, 'ariselu' are believed to add bulk to the faeces and thereby serves as a laxative. There are many traditional beliefs about the medicinal properties of traditional food products.

However, there are certain food beliefs for which a sound scientific basis is forwarded. These beliefs include:

- i. Certain lactic acid bacteria (eg. *Lactobacillus acidophilus*) and moulds have been found to produce antibodies and bacteriocins.
- ii. The beneficial health effects of lactic acid bacteria on intestinal flora have been well documented. Ingestion of foods containing live lactic acid bacteria is likely to improve resistance against diarrhea causing microorganisms.
- iii. Substances in traditional fermented foods have been found to have a protective effect against certain types of cancer.

Traditional foods and HACCP approach

As most of the traditional foods are produced in the unorganized sector, they are prone to contamination with extraneous material and to easy spoilage. Usage of some modern methods like Hazard Analysis and Critical Control Point (HACCP) can assure their safety.

HACCP is a food safety risk management tool that is applied to determine significant hazards pertaining to specific products and processes and to control the occurrence of such

hazards, HACCP has received international acceptance as a means of planning for food safety. HACCP is a change from traditional methods that are reliant on end product, testing to determine if the product is safe. HACCP is



preventive in its approach in that it aims to prevent rather than detect problems.

Several foodstuffs like bhujia, sev, chiwda, mixture, rasgolla etc., are being produced on a mass scale and exported. HACCP has a major role to play in this sector.

Many of the benefits of HACCP are of a long-term nature such a reduced wastage through improved process control, more efficient use of resources, which will provide a fiancial reward for the company. Traditional foods surely stand to benefit from this.

Market Potential

Marketing of traditional foods abroad is mostly targeted to two groups of population-Indians living abroad and the bulk population of respective countries. For the latter group, recipe modification particularly with respect to reduction of spices, fat and/or sugar is necessary to promote their acceptance.

The export of Indian foods abroad can be promoted by the orientation of more Indian restaurants in important citis of western countries. The entire world is inescapably caught in the web of globalization. The vast market potential abroad has to be improved. Attractive packaging and display increased shelf-life, better microbiological 'safety will go a long way in enhancing the popularity of the traditional foods. It is thereby important to include an element of novelty and minimize production costs to enable the Indian Food Industry to survive. This is a challenge traditional food industry faces today.

The Future of Traditional Foods

The nutritional importance of traditional foods needs to be recognized and popularized. Traditional food products are socially, culturally, and economically important. Traditional foods play an important role in ensuring food security and hold a tremendous potential in combating malnutrition to a significant extent. It is essential that the knowledge of their production is not lost. The wealth of knowledge on traditional products needs to be further expanded in collaboration with small-scale food processors.