**CONVENIENCE FOODS**

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**Introduction**

Advanced technological developments in various aspects of food processing field like equipment, processes and packaging material have made revolution in the development of convenience foods as per the necessity, taste as well as the nutritional requirements of the consumers. Convenience foods are commercially prepared foods designed for ease of consumption. Products designated as convenience foods are often prepared food stuffs that can be sold as hot, ready to eat dishes at room temperature, shelf stable products or as refrigerated or frozen products that require minimal preparation typically by just heating the particular product (Manohar *et al*. 2005).

Over the years, processed food has become one of the fastest growing industries in the world and Indian market is not far behind. The market for processed foods is still in the early stages in a developing country like India, but surely has a big impact to play in our daily diets. The convenience food industries with the state-of-the-art technology have been very successful in penetrating the local household in way of successful marketing and advertising of their products. These convenience foods have started replacing fresh and healthy food from consumers’ diet with processed food. In the early 1990’s when families started exploring outside food in the restaurants and moved on to accepting a wide variety of delicacies from world-over. Fast food is one of the major examples which gained acceptance of Indian palate after the multinational fast-food players adapted the basic Indian food requirements viz. vegetarian meals and selected non-vegetarian varieties (Srinivasan and Shende 2016).

**Convenience food**

**“**Convenience foods are a class of foods which impart convenience to the consumers by way of little or no requirements of major processing or cooking before their consumption (Saxena, 2017). However, the major thrust is to provide convenience by way of saving the cooking time and labour in the kitchen. In addition, convenience for long shelf-life, reduction in weight, good quality, easy commercial availability is of prime concern (Arya, 1992). Several technologies, methods and products have been developed to standardize and commercialize ready-to-eat (RTE) or easy-to-reconstitute (ETR) mixes of traditional or popular foods. Though most of the people are aware of these kinds of products, the acceptance level and consumption are comparatively less in developing countries. The food industry should provide some major pathways to the consumers to get the knowledge and exposure on RTE or ETR food products.

**Classification of convenience foods**

Understanding the differences in types of convenience foods on the market can be helpful in making food buying decisions. Convenience foods can be classified as either basic, complex, or manufactured.

***Basic* convenience foods** are products in which basic processing techniques such as canning, freezing, or drying have been applied to single-ingredient items or products with a limited number of ingredients. Although these foods may save some preparation time, they do not have built-in "culinary expertise." Examples include instant dry potatoes, canned green beans, and frozen orange juice concentrate. Many of the basic-type convenience foods are vegetable and fruit products.

***Complex* convenience foods** include multi-ingredient "prepared" mixtures that usually have a high level of timesaving features and culinary expertise. Some examples include frozen ready-to-heat plate dinners and entrees, frozen vegetables with a sauce or in a casserole, ready-to-eat baked products, ready-to-eat/ heat meat products.

***Manufactured* convenience foods** have no home-prepared counterparts. Products in this category includes foods such as ready-to-eat cereals, crackers, some candies, carbonated beverages, and most alcoholic beverages. foods offer ways to save time and effort by eliminating preparation activities such as cleaning, peeling, mixing, and cooking. Also, their use substantially reduces pre-preparation chores (such as planning, buying, and storing ingredients) and clean-up chores (such as dishwashing).

Convenience foods have varying degrees of built-in services. The built-in culinary be thawed before serving; some are prepared items which need only heating or rehydrating with hot water. Others, such as dry mixes that have most of the required ingredients assembled in one package, must be mixed and cooked to achieve ready-to-serve form. Several convenience forms, offering varying degrees of "readiness," are available for some foods. In fact, often the decision is not so much whether to buy the convenience product or to prepare the food from scratch, but which convenience food form to buy. Besides labour saving and timesaving advantages associated with food preparation, other desirable features of convenience foods include ease of storage, change in storage space requirements, ease in transporting the food from the grocery to the home because of lighter weight or reduced bulk, and extended storage life compared to fresh foods.

Basic-type convenience foods, particularly vegetables, often cost less than their fresh or home-prepared counterparts. An important point to remember, however, is that cost comparisons between fresh and processed produce items depend upon seasonal price fluctuations. Fresh fruits and vegetables in season are sometimes available at bargain prices and may cost less than processed food forms.

Complex-type convenience products that offer a high level of culinary expertise often cost more than similar foods made from home recipes. Main dishes and baked goods made from a mix often cost about the same as or less than their homemade versions. In figuring comparative costs, remember to include ingredients that must be added to mixes.

Manufactured-type convenience foods such as carbonated and alcoholic beverages offer calories but little in the way of nutrients. They are expensive "extras. " If you need to trim your food budget, this might be a good place to start.

**Types of convenience foods**

**Ready To Eat Foods (RTE):** The foods that can be directly consumed from the package with or without warming, thawing and without preparation are called RTE foods.

Dairy snacks: Processed cheese, cheese spread, butter and ghee.

Dairy sweets: Gulab jamuns, kala jamun, Rasgullas, pedhas and burfis.

Other sweets: Sohan papdi, sohan halwa, jilebas, Mysore paks, besan laddu and other sweets.

Bakery products: Biscuits, bread and cakes

Fried snacks: Chips, wafers, fried legumes and other snacks.

Meat products: Chicken 65, Chilly chicken, Grilled chicken, Tandoori chicken, chicken kebab, Nuggets, Canned foods, Retort processed meat products etc.,

**Retort processed foods:** Paneer curries, Dal fries, parathas can be packed well in retort pouch made of polypropylene for six months. The products can be heated along with pouches and eaten as and when needed.

**Frozen foods**: Ice cream, chicken, kabab, fruits and vegetables.

**Extruded snacks**: Cereal and pulse based, soya based extruded snacks.

**Adjuncts**: Pickles, dry chutneys, fruit chutneys etc

**Ready to use foods (RTU):** Foods which need some preparation like cooking, frying and reconstitution before consumption are called ready to use foods.

Masalas: Butter chicken mix, garam masala, chat masala, meat masala, curry masala, pulav mix, puliogare mix, rasam powder, sambar powder, ginger and garlic paste.

Fresh cut vegetables: Carrots, beans, cabbages and others are washed and cut into slices, cubes and shreds and modified atmosphere packed.

**Ready to cook foods (RTC):** Noodles, instant idli, dosa batter, and rava mixes, payasam mix, badam milk mix, variety of milk products, variety of meat products

**Ready to fry foods (RTF):** Papads, fingers chips, wafers, fryums and meat varieties

**Ready to reconstitute foods (RTR):** Khoa powder, kulfi mix, instant ice cream mix and weaning mixes.

Breakfast cereals: Corn flakes, wheat flakes, jowar and millet-based flakes, pops and extruded cereals.

**Canned foods:** Fruits vegetables, pulps, rasagulla, jamun, curries, meat, fish and chicken.

**Beverages:** Ready to drink beverages (RTD): The drinks that can be directly consumed from container like apple, mango, straw berry and milk-based beverages. Horlicks and malt shakes are available in tetra packs, with a shelf life of 4 months. Sweet lassi and cold coffee are available with a shelf life of 6 months. Natural fruit juices in tetra packs are sold.

**Ready to serve beverages (RTS):** These beverages need some preparation before serving. The beverages have to be diluted or reconstituted before use. These include fruit concentrates in different flavours, Tropicana, spicy tomato rasam, soup, chicken soup, instant soup powders and instant juice powders like rasna.

**USDA Category and its code on convenience foods**

 A 14-category degree of readiness classification scheme was developed for food used in at-home consumption. It consists of three categories: no preparation, some preparation and considerable preparation.

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| **Sl. No.** | **Readiness Category** | **Description** | **Codes** |
| 1 | Eat as is | Products requiring no further processing to achieve a servable form. Consumed as purchased  | 00 |
| 2 | Ready to Use | Products requiring no further processing to achieve a servable form but typically used in combination with other food rather than served alone | 01 |
| 3 | Cut slice, shell | Foods which are eaten raw but have to be trimmed, cut, sliced or shelled first. Includes ready-to-eat and ready-to-use items that require cutting, peeling or slicing. | 02 |
| 4 | Thaw  | Foods which have been frozen from the ‘eat-as-is’ form and only require thawing prior to consumption. Also includes items frozen from ‘ready-to-use’ form. | 03 |
| 5 | Hydrate | Foods which require addition of a liquid, most frequently water, prior to consumption. Includes several items where one ingredient such as sugar is also added | 04 |
| 6 | Ready to heat  | Products which need only heating to obtain servable form. Usually includes fully cooked foods which are not consumed cold. | 05 |
| 7 | Thaw then heat | Foods that have been frozen in ‘ready-to-heat’ form and only require thawing prior to heating. Includes fully cooked foods which are not consumed cold.  | 06 |
| 8 | Hydrate then heat | Foods which require addition of a liquid, most frequently water, prior to heating. Also includes foods hydrated with heated water. | 07 |
| 9 | Ready to Cook | Foods which have been processed to a readiness state allowing direct cooking to achieve a servable form. Also includes commercially frozen breaded products and nuts which must be roasted or boiled | 08 |
| 10 | Thaw then cook | Foods which have been frozen in ‘ready-to-cook’ form and only require thawing prior to cooking | 09 |
| 11 | Hydrate then cook  | Foods which require the addition of a liquid, most frequently water, prior to cooking. | 10 |
| 12 | Cut, peel, shape, then cook | Items which must be pared, peeled, shelled, trimmed, cut, scaled, shaped or skinned before cooking. Also includes foods which must be thawed before cutting, scaling or shaping before cooking. | 11 |
| 13 | Add other ingredient then cook | Foods which require the addition of other ingredients as well as manipulation prior to cooking. Also includes frozen items which must be thawed prior to the addition of other ingredients and subsequent cooking. | 12 |
| 14 | Eviscerate, prepare forcooking, then cook | Items which must be eviscerated prior to preparation for cooking. Includes frozen live-weight meat, fish and poultry which first must be thawed, then prepared for cooking. | 13 |
| Sources: Consumer nutrition division, USDA (1977-78) |

**Need for Convenience foods**

* Increased education and employment opportunities for women.
* Large number of employed couples.
* Increased industrialization and urbanization.
* Large floating population due to promotion of tourism
* Better wages and consequently higher surplus incomes.
* Changing life styles and food habits of middle-income groups.
* Better awareness and availability of convenience foods.
* Lack of time, busy and fast-moving life.
* Usefulness of convenience foods
* Reliable and consistent in quality
* Available in all seasons
* Ethnic and exotic meals are readily available.
* Saving space and labour.
* Have nutritive value equal to or higher than fresh foods.
* Reduction in preparation time, and the wastage
* Allows greater variety and quality.
* Very easy to handle and attractive.
* A person unable to cook can use it easily.

**Limitations of convenience foods**

* Improper handling can lead to food spoilage.
* Canned foods tend to develop specific flavour.
* High initial investment is required
* More expensive than fresh foods.

**Conclusion**

 Traditional foods are available at commercial level which are prepared by cottage industries and by multinational companies. Supplementation with protein rich sources and preparation of ready to eat foods would correct nutritional inadequacy and provide variety. Instant mixes are needed for all segments of population, including armies, railways and even patients. The convenience foods meet the urgent needs of situation of offering hospitality to unexpected guests and a busy working women. Changing life style has brought about changes in eating habits that has great demand for convenience foods in Indian market. Desire for more leisure time and demand for foreign or sophisticated dishes inspired by the media and increased trend.

**References**

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