**APPLYING CONTEMPORARY GASTRONOMY PRINCIPLES**

Lovelesh Gupta

Assistant Professor

Department of Tourism & Hospitality Management

Skill Faculty of Management Studies and Research

Shri Vishwakarma Skill University, Haryana

**Abstract**

CONTEMPORARY DEVELOPMENTS AND TRENDS IN GASTRONOMY  
  
 A picture of food consumption (availability) trends and projections to 2050, both globally and for different regions of the world, along with the drivers largely responsible for these observed consumption trends are the subject of this review. Throughout the planet , major shifts in dietary patterns are occurring, even within the consumption of basic staples towards more diversified diets. Accompanying these changes in food consumption at a worldwide and regional level are considerable health consequences. Populations in those countries undergoing rapid transition are experiencing nutritional transition. The diverse nature of this transition could also be the results of differences in socio-demographic factors and other consumer characteristics. Among other factors including urbanization and food industry marketing, the policies of trade liberalization over the past two decades have implications for health by virtue of being a factor in facilitating the ‘nutrition transition’ that's related to rising rates of obesity and chronic diseases like disorder and cancer. Future food policies must consider both agricultural and health sectors, thereby enabling the event of coherent and sustainable policies which will ultimately benefit agriculture, human health and therefore the environment.  
  
**Key Words***Branded Food, Storage, Indian Railways, International Food, Food in India, Menu, Equipment, Commodities, Method of Cooking, Recipe, Organoleptic Test*  
  
**TREND 1- BRANDED FOODS**Branding is an efficient marketing strategy tool that has been used with frequent success within the past. Today, branding is experiencing a replacement popularity resulting from new, innovative applications. Although there are instances where branding has been but successful, marketers are starting to find the acceptable applications during a given setting. Issues and problems concerning branding strategy today include the choice of a name . This fundamental issue will impact on the success of a branding strategy. Once a reputation is chosen , marketers need to choose the advertising strategy to support and communicate the name. Finally, keeping the brand during a strong position may be a critical concern. New areas of branding include corporate, industrial, and repair branding. These nontraditional branding environments are getting the longer term for marketers using branding strategy. To add to the new branding areas, there are new branding techniques. These techniques include brand extensions and ingredient branding. New strategies, techniques, and arenas for branding need to be managed. The organization must support and identify with the strategy. The goals, objectives, and mission of any organization should be in line with the branding strategy employed.

1. **Branded Foods**

* Branded foods have been ruling the cabinets of household kitchens over several decades
* Sauces, confectionery, spices, dairy products, instant/ready to eat foods etc.
* Ready to eat branded foods have created a lifestyle shift in many communities/countries
* They have created subsidiary industry such as convenience food stores, cold storage,chains, packaging and designing.

1. **Branded Food-Benefits**

* A boon for time starved people
* Quality assurance in terms of food safety standards
* Health and nutrition standards
* Ease of storage and no cooking or convenience cooking
* Adopting to contemporary gastronomic and lifestyle patterns such diet foods

1. **Popular Branded Foods**

* Nescafe
* Nestle range of dairy and instant foods
* Kellogg's Breakfast Cereals
* Quicker Oats
* Heinz Foods
* In India, branded Basmati Rice, Pickles, Chutneys, Blended Spices, Snacks most branded foods have spread globally.

1. **Trends in Branded Foods- A Study on Indian Railways**

* Referencing: www.indianrailways.gov.in, the official website of the Indian Railways Board.
* Taking account of the enormous size and increasing passenger base, the IR recently formulated a policy to introduce ready to eat branded foods for the convenience of its millions of passengers travelling daily.
* This policy aims at making quality assured and variety of popular branded foods available on trains, as typical Indian journeys take long hours.  
  Branded Foods- Indian Railways
* IR has also entered into a strategic partnership with the Dominos Pizza for online ordering and delivery on trains.
* This has brought a new trend in food options available to passengers.

**TREND 2-INTERNATIONAL FOODS**

While much of the focus of the economic literature has been on the role of public  
Food safety and quality standards both as policy instruments and as non-tariff barriers to trade, it's evident that non-public standards are playing an increasing role within the governance of agricultural and food supply chains.

1. **International Foods**

* World Food has now become a “Global Kitchen”. It is trendy to try new foods from various cuisines.
* New world and developing countries, which over the centuries have been consuming traditional foods, have now started adopting international foods in a generic manner.
* From “Fine Dining” they are now talk of the community and shifted to “Mass Dining”  
  Popular International Foods
* American Fast Food e.g. Burgers, Sandwich, Donuts, Frozen Desserts
* Italian Pizza and Pasta
* Chinese and other Oriental Cuisine
* Cheese
* Beer/Vodka/Wines (wine tasting is popular)
* Organic Foods and Preserves
* Grills, Barbeque and Sizzlers

1. **International Foods in India**

* The early 1980’s, saw the advent of international foods in the Indian culinary space.
* The first popular international food was Chinese and there after Pizza and Pasta
* The Maggi brand of instant Noodles has been a huge attraction amongst all age groups.
* Breakfast cereals, canned juices, organic foods have been other popular foods in India  
  International Foods in India
* India’s generation next e.g. youth in the age group of 18 to 35, have shifted to becoming coffee drinkers from earlier generations, which have been tea drinkers. This has been mainly due to the advent of international barista brands in the Indian urban market.
* The most recent trends have been for exotic international vegetables such as parsley, broccoli, bell peppers, peanut butter etc.

**APPLY GASTRONOMIC PRINCIPLES IN THE CONSTRUCTION OF MENUS**

Traditional approaches to menu planning and menu-item selection often ignore the information, which may otherwise better reflect organizational and market needs. In addition, concentrating efforts on menu engineering-type of analysis highlights menu performance only after the menu has been planned and put to use. Equally, however, it must also be said that the majority of chain/franchise operations do not have the flexibility to design and develop menus on a short term basis, and although such medium to long-term menus can be adjusted to the changes in market needs, still many chain/franchise operations prefer not to. This article reports on the concept and application of Menu Planning Qualitative Variables (MPQV) as an aid for menu planners. A Control Group and Experimental Group of menu planners were chosen for the study to test the utility of the MPQVs. The respondents (Control group A) were required to develop a menu using a traditional menu planning approach, whilst the Experimental group (B) used the MPQV approach. Important differences in the outcomes between the Control and Experimental groups in terms of menu planning approaches were found. The Experimental group thought that the menu planning information given to them was more useful and was more applicable to their on-the-job needs.

**APPLY GASTRONOMIC PRINCIPLES IN THE CONSTRUCTION OF DISHES AND BEVERAGES**

The cultural diversity of culinary practice, as illustrated by the variety of regional cuisines, raises the question of whether there are any general patterns that determine the ingredient combinations used in food today or principles that transcend individual tastes and recipes. We introduce a flavor network that captures the flavor compounds shared by culinary ingredients. Western cuisines show a tendency to use ingredient pairs that share many flavor compounds, supporting the so-called food pairing hypothesis. By contrast, East Asian cuisines tend to avoid compound sharing ingredients. Given the increasing availability of information on food preparation, our data driven investigation opens new avenues towards a systematic understanding of culinary practice.

**THE EQUIPMENTS, COMMODITIES AND METHODS TO PREPARE AND COOK DISHES**

* Caterers cannot start their business without tools, equipment and fuel; therefore, you should be able to identify and use the tools and equipment for the specific jobs in the business.
* Tools, equipment and fuel are important items needed for catering because in catering food is prepared, cooked and served. These tools and equipment increase efficiency and save time. In this unit, we shall classify the tools and equipment into large, small and mechanical with their examples, how they function, how to choose and finally how to care, maintain and store them.
* Fuels will also be considered here because they are the means by which food is cooked. They shall be classified according to their sources.

**EQUIPMENTS**

What are tools and equipment?

They are the various items that are used during food preparation, cooking and serving. They include working tables, cooking pans, ranges, fryers, sinks kitchen utensils, mortar, blenders, mixers etc. These tools and equipment can be put into groups according to their sizes and functions.When they are put into sizes then, they are classified as large, small and mechanical equipment.

**COMMODITIES**

This category includes dozens of varieties of grains, beans, legumes and seeds, and can be utilized in numerous forms such as; whole, cracked, flaked, instant, flour, pasta and sprouted.

**Advantages :**

– Very economical- little cost for significant nutritional value.

– Easily obtainable.

– Stores well for long periods of time.

– Versatility of preparation options and diversity of uses.

– Historically relied upon during emergencies.

– Reproducible.

– If prepared and utilized properly, can fulfill total nutritional needs for some time.

**Disadvantages :**

– Can require large quantities of fuel and water to prepare.

– Requires significant preparation time to utilize all the diverse benefits.

– Susceptible to infestation if not properly stored.

– Requires preparation knowledge. Most people do not know how to prepare basic commodities.

– If not prepared properly or suddenly introduced into the diet in quantity, grains and beans can cause significant digestive problems.

– Heavy- Not easily transported if you need to be mobile.

– Many people have allergic reactions to foods in this category.

– If you rely on only grains and beans for nourishment for an extended length of time, you may have problems digesting these foods; especially if you don’t normally incorporate them into your diet. Preparation diversity is critical.

**Tips**

– Smaller grains (such as millet, amaranth, quinoa, and teff) and smaller beans and legumes (such as adzuki, lentils, split peas, mung, and small whites) will require less time, fuel and water to prepare.

– Combine like sized grains and beans when cooking for a complete protein meal.

– Pressure cookers and pre-soaking of most beans will significantly reduce the cooking time of grains and beans.

– Newly “rediscovered” ancient grain varieties such as amaranth, quinoa, kamut, teff and spelt, are highly recommended because of their superior nutritional value, unique taste and preparation convenience- available at natural food stores.

– To reduce cooking times for whole grains, try adding a handful to a thermos, or similar insulated container, add boiling water and let sit all day or overnight. (Use at a ratio of one part grain to one part water by volume). Add dried fruit, nuts, sweetener etc. and enjoy a no cook hot cereal.

**METHODS OF COOKING**

List the dry and moist heat cooking methods

* Dry heat Cookery Methods :- Baking
* Steaming
* Grilling
* Roasting
* Boiling
* Stewing
* Moist heat Cooking Methods:- Shallow Frying & Deep Frying
* Barbequing
* Basting
* Broiling

**INNER RELATIONSHIP BETWEEN FOOD AND BEVERAGES AND THE FIVE SENSES**

The Tasting Experience: Our Five Senses and Some of the Ways They Influence Each Other

1. **Taste**  
     
   The ‘taste’ experience is really an accumulation of multiple senses. Many now ask this as an ‘organoleptic’, ‘multi-modal’, or ‘synesthetic’ experience. For an extended time, language lacked adequate descriptors to try to to the connection justice, in spite of the very fact that this idea was considered by both philosophers and scientists. When neuropsychologists mention synethesia, they're often pertaining to a rare and sophisticated neurodevelopmental condition where, for instance , someone sees sounds or letters as colors. Those within the food research field have co-opted this definition to mean more of a general multi-modal experience, where the stimulation of 1 sense causes a perception during a different sense (Auvray and Spence 2008). Perhaps ‘sensory integration’ or ‘multimodal perception’ are better terms. For now, pick the one you wish .
2. **Smell**  
     
   Smell is certainly one among the larger players within the organoleptic experience, but it's not the sole one! we will smell things via two pathways, one is thru the nostrils (orthonasally), and therefore the other is up through the throat (retronasally); see figure 1, below (Bojanowski and Hummel). Either way, there's no thanks to close off the mouth from the nose (in real world , at least) and thus once we mention ‘taste’, we are really talking about the synethesia of a minimum of smell and taste. Importantly, though, taste and smell are sent to the brain via different pathways. They converge within the orbiofrontal cortex (Stevenson and Tomiczek 2007). Located within the front of the brain behind the eyes, this cortex is understood to be the middle of emotions and decision-making. Besides this synethesia, we've been conditioned to ‘taste’ with both senses through associative learning, which influences all of our flavor experiences (Prescott In Press).
3. **Touch**  
     
   Tactile sensations within the mouth can't be separated from taste. The structure of a food or beverage can influence the discharge of volatile compounds in your mouth, therefore these compounds can find their high to your nose retronasally (Bojanowski and Hummel 2012). To deal with this, a body of research has been conducted on viscosity and the way this influences perceived flavor. Most work has found that as food hardness increases, perceived flavor intensity decreases (Tournier et al. 2009). Some think that the feel alone influences how volatiles are released, which is in fact influenced by our ‘mastication’ (chewing) patterns (Wilson and Brown 1997). Others have evidence that only perception is influenced by the textural properties of whatever is in our mouths and therefore the volatile aromas remain unchanged
4. **Sight**

A lot of how we see influences taste through expectation supported our own learned associations (Small in Press). We will all be influenced by how a meal is presented (Zellner et al. 2011), but it seems that the way sight influences our perception of food and beverages is far more complicated. Presentation can affect both what proportion  
We expect to love the food and our actual sensory experience with it, although not all studies about this link have found a direct correlation between the 2 . Since we will never escape from our learned experiences and history with food, the connection between expectation and truly liking food can always be influenced by our past supported what we see ahead folks

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1. **Sound**

Since our brains are wired to mix information from all sensory modalities, we must not forget that sounds also can be related to , or influence, flavors. A number of the foremost interesting research on this subject has linked certain tastes to musical pitches, which those pitches are capable of influencing flavor perception (Crisinel et al. 2012; Crisinel and Spence 2010). One study even went thus far on link specific sorts of instruments with flavors. Specifically, sweet or sour tastes were linked to high notes, whereas bitter and umami tastes were matched to low notes. Instruments like piano or strings were linked to sweet and pleasant flavors, whereas bitter and sour tastes were related to intensity and brass or woodwind instruments

**APPROPRIATE RATING SCALE WITH CRITERIA AND VALUES TO WORK OUT THE ACCEPTABILITY AND QUALITY OF FOOD AND DRINK**

Affective or hedonic measurement may be a cornerstone of sensory science, because it provides critical information about individuals’ likes and dislikes for various products. Therefore, it's not surprising that debate about hedonic scaling is ongoing which new methodology for hedonic scaling emerges regularly. This research adds to the present body of data by comparing best–worst (BW) scaling, a choice-based methodology, with an immediate scaling method, the labeled affective magnitude (LAM) scale. We start with a literature review of direct and indirect scaling methods then present two empirical studies that compare best–worst and LAM scaling. The key finding is that neither scaling method is superior to the opposite . However, what tentatively emerges is that choice of scaling method must be made within the context of the character and complexity of the study to be conducted, the character of the respondents, and therefore the nature of the test samples themselves. With numerous criteria influencing the selection of hedonic scaling methodology, we advocate that researchers be explicit about the standards that underlie their empirical work.

**ORGANOLEPTIC EVALUATION TECHNIQUES**

Organoleptic properties are the aspects of food or other substances that a private experiences via the senses – including taste, sight, smell & touch.

Organoleptic tests are sometimes conducted to work out if food or pharmaceutical products can transfer tastes or odors to the materials and components that are packaged in. time period studies often use taste, sight & smell (in addition to food chemistry and toxicology tests) to work out whether a foodstuff is safe.

Organoleptic analyses are occasionally still used when the protocol for a particular sample doesn't have a high enough sample throughout to satisfy the demand. During this case organoleptic analysis is a primary screen to work out which samples must be analyzed consistent with the first method protocol, and which samples need no further sensory analysis.

**Conclusion**

1. I could realize that when guests take a lively interest within the selection of their food or drink, they feel a part of the gastronomic process and evaluate their overall experience positively.
2. Suggestive inputs from guests also help in designing/updating of menus, making amends to the flavors, balancing the seasonings and making the menus more customized.
3. The foremost important aspect of any satisfactory gastronomic experience is to strike balance between the food and drink.
4. Most guest ratings were high, once they ordered extra or alternative beverages to travel alongside their food courses.
5. Right balance of salads/accompaniments and course breaks/add on dishes enhance the gastronomic experience and enhance the appetite and digestive process.
6. The choice of the dessert/sweet was rated by the guests for its final role in settling all the strong flavors of the food and drink.
7. Just in case of the Indian menu, the digestive drink enabled faster digestion and completion of the gastronomic experience.
8. The ratings for the temperature of the food and drink enable us to know the time and flow chain of the food and drain the cup to the guest table.

**Referencing & Bibliography**

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