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## Market dimensions of industrial juice production

Anushree Priyadarshini

*Technological University Dublin*, [anushree.priyadarshini@tudublin.ie](mailto:anushree.priyadarshini@tudublin.ie)

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# **Market Dimensions of Fruit Juice Industry**

**Anushree Priyadarshini<sup>1\*</sup> and Akanksha Priyadarshini<sup>2</sup>**

<sup>1</sup> DCU Business School, Dublin City University, Glasnevin, Dublin, Ireland

[Email: [anushree.priyadarshini@dcu.ie](mailto:anushree.priyadarshini@dcu.ie)]

<sup>2</sup> UCD Michael Smurfit Graduate Business School, University College Dublin, Carysfort Ave,

Blackrock, Co. Dublin, Ireland [Email: [akanksha.priyadarshini@ucdconnect.ie](mailto:akanksha.priyadarshini@ucdconnect.ie)]

**\*Corresponding author:**

Dr. Anushree Priyadarshini

Email: [anushree.priyadarshini@dcu.ie](mailto:anushree.priyadarshini@dcu.ie)

Ph: +353-1-716-5411

## **Abstract**

The juice sector is currently demonstrating positive and dynamic growth mainly due to a change in lifestyle, tendency of consumers to prefer healthy products and an increase in purchasing power. Fruit juices form part of what are termed as the 'New Age Beverages'. In sync with growing consumer inclination towards healthier choices, manufacturers are moving over to healthier ingredients in their juices. Numerous new and innovative products are being launched globally by manufacturers to stimulate sales through innovations in flavor blends, calorie and sweetness levels, and functional benefits, very much shaped by the major lifestyle trends. This chapter aims to offer insight and overview of the trends, opportunities and threats of the fruit juice industry and highlight the factors affecting consumers' food choices and innovations in fruit juice marketing.

**Key words:** Global fruit juice market, new age beverages, consumer food choices, fruit juices marketing

## **Introduction**

The juices market is one of the most innovative product markets in the food and drinks sector and one of the most competitive segments in the beverage industry. Driven by increasing awareness and preference of consumers for healthy products the market is expanding with the use of high-technology in processing and packaging (Baourakis and Baltas, 2004). Fruit juices form part of what are termed as the 'New Age Beverages'. Currently, natural beverages, having no additives or preservatives are ruling the fruits and vegetables juice market and drinks made of organic ingredients are gaining popularity. In sync with growing consumer inclination towards healthier choices, manufacturers are moving over to healthier ingredients in their juices. Numerous new and innovative products are being launched globally by manufacturers to stimulate sales through innovations in flavor blends, calorie and sweetness levels, and functional benefits, very much shaped by the major lifestyle trends (Annette, 2008).

The fruit and vegetable juice market is segmented by the geography, the major ingredient used, concentration of the juices, and the category served by the juice. The market is depended on the geographical distribution and availability of the fruit/vegetable and the health considerations. It is expected to witness increased demand levels in both value and volume terms as the demand is also being triggered by the prevalent trend of preference for juice drinks in majority of Asian and Latin American countries. Growing economies such as China and India present lucrative opportunities in terms of potential consumers (Annette, 2008). Reviewing the global juice market for its trends, opportunities and threats, this chapter tracks the factors affecting consumers' food choices and innovations in fruit juice marketing, and an outlook to future for fruit juices market is outlined.

## Market Overview

The global market for juices is expanding. In 2014 the global juices market had a total revenues of \$110.8bn, representing a compound annual growth rate (CAGR) of 3% between 2010 and 2014. Market consumption volume increased with a CAGR of 4% between 2010 and 2014, to reach a total of 74,271.5 million liters in 2014 and is expected to keep growing, driving the market value up to \$128,741.1 million by the end of 2017. Between 2007 and 2013 the market increased with an average annual growth of 3.5% while the expansion of the industry is forecasted to reach 3.7% p.a. in the coming years (Savara, 2015).

China, France, Germany, the United Kingdom and the United States represent the largest fruit and vegetable juice markets with China being the world leader. Its juice market is nearly twice that of US in market volumes, with 2.3 bn of its 19.7 bn litres sold at retail in 2012 to be pure juice. The volumes in China exceeded Europe as a whole for the first time in 2014 (Mintel Report, 2013). Nonetheless, currently Latin America juice markets are among the fastest growing regions globally. Retail value for Chile is close to 20% CAGR (compound annual growth rate) on retail value, with Brazil and Mexico close to 14% and Columbia to 8.9%. In terms of forecast for the CAGR (up to 2017), the fastest growth is expected to occur in India (18.5%), Indonesia (16.0%), South Africa (8.6%), Brazil (8.4%) and Malaysia (8.3%) and the slowest growing regions are forecasted to be South Korea (-1.4%), US (-1.4%), Italy (-1.5%), Austria (-2.6%) and Germany (-4.6%) (Figure 1) (Mintel Report, 2013).

While the major players in the global fruit and vegetable juice markets are: The Coca Cola Company, PepsiCo, Del Monte, Nestle, Welch's etc. In terms of the flavours, currently orange juice accounts for 29.1% of the global demand while the remaining market share is divided between grapefruit juice (2.1%), other citrus juice (4.5%), apple juice (27.1%), pineapple

juice (3.6%), grape juice (8.5%), tomato juice (0.5%), other single fruit or vegetable juice (15.2%) and mixtures of juices (9.3%) (Figure 2) (Persistence Market Research Report, 2015). Although overall sweet is the preferred flavor globally followed by tart, herbal and vegetable, regional variations occur in the preference of each. Research shows that while sweet is preferred most in MEA region followed by North America, Central and South America, Asia, Australia and Europe. In the case of Tart the order of preference is Europe, Central and South America, North America, Asia, Australia and MEA. Herbal flavours are preferred most in Asia, Australia, MEA region followed by Central and South America, Europe and North America while vegetable flavours though least popular globally have regional preference in the order of North America, Asia, Australia, MEA region, Europe and Central and South America.

Overall, whilst juice is a mature category, its market is expanding owing to the health trend and consumer concerns relating to the use of artificial flavors, colors and preservatives in drinks that are leading to greater demand for healthy, natural products. Premium products like luxury products designed for connoisseurs, nostalgic products, products that communicate provenance and a growth in indulgent drinks particularly smoothies are driving growth in the juices market and presenting opportunities and threats for the global fruit juice market.

## **Key Trends in the Juices Market**

The health trend continues to dominate the beverage market, and as consumers are increasingly searching for healthier substitutes to carbonated soft drinks, juices provide a convenient and flavorsome option. However, as juice is a mature market, manufacturers battling to grow sales are keenly focusing on product differentiation and developing juices that go beyond just tasting good and providing general health benefits. Based on buyers changing taste

and preference drinks manufacturers are focusing on adding extra vitamins and minerals to their offerings (Research and Markets Report, 2012). Consumers are increasingly preferring natural fruit juices or which contain 100 % in fruit content (concentrated juice). This '100% juice category presents substantial growth opportunities for juice making companies, and manufacturers currently are also venturing in the 'free from', functional, luxury and ethical drinks (Persistence Market Research Report, 2015). The key trends that have been prominent over the few years include:

- Functional drinks – investment in super fruits, soy drinks, omega-3, probiotics and prebiotics, added calcium and natural energy
- Marketing to kids – creating credible healthy alternatives to carbonated drinks
- Beauty support drinks – beauty from the inside out
- Portions – delivering '5 a day' in a bottle
- Luxury Juices – gourmet or experimental trend
- Ethical Juices – organic juices, green packaging

### **Functional drinks**

The market for functional drinks has advanced rapidly with the growing focus of consumers on what they eat and drink to influence their health. Superfruits are readily being incorporated into health juices owing to the presence of high levels of polyphenols present naturally in them. Ingredients like omega-3, probiotics, prebiotics, botanicals and isoflavones from soy are being used in juices nowadays with increasing frequency as these satisfy consumer desire for health through natural ingredients (Annette, 2008).

### *Added calcium*

Juices are now being developed with calcium as the key functional ingredient and a range of juice products are appearing in the market that contain added calcium. Calcium is known to be very important for older female consumers as it is good for bone health. An example of one such drink targeted primarily at women worried about their calcium intake is the Osteo range of fruit juices from Osteoblast Beverages LLC. While the drink contains no artificial ingredients and is free from caffeine, it offers a fitting solution to attain a good level of calcium intake in the form of a sweet tasting drink. It is marketed to consumers as a substitute to milk in providing calcium required for the body. Another range of calcium enriched orange juices have been recently launched by Canada's second largest food retailer Sobey's Inc, and is marketed as a product 'specially designed as a source of calcium for people who do not drink milk'.

### *Superfruits*

Fruits rich in antioxidants are referred to as superfruits because of antioxidants' role in everything from preventing heart disease and cancer to improving the immune system and reducing the aging process. Found in the red, blue and purple pigments that give fruits their vibrant colour, antioxidants are commonly present in berries, grapes, cherries and pomegranates all of which are regarded as 'superfruits'.

With the advancing health trend, the popularity of superfruits have risen owing to their health credentials and manufacturers are extensively exploring them in a bid to differentiate their products. While mature markets like UK, Japan and the US are driving their demand new superfruits are progressively being identified and championed. Emerging superfruits include goji berries, açai, acerola, mangosteen and noni. Because these fruits are less 'mainstream' they tend to capture consumers' interest, particularly of those that are keen on trying on new flavours and

taste sensations. An recent example of a superfruit juice is Gloji All Natural Juice, launched in the US and marketed as ‘the juice that makes you glow’, the drink positions itself as the one that naturally rejuvenate, and restore the body inside and out. Another growing trend is addition of an emerging superfruit to a traditional product, for example Lakewood Pomegranate with Goji Organic 100% Fruit Juice Blend. The drink captions pomegranate whilst introducing goji.

Both these drinks are positioned to appeal to the health sentient consumers who are also adventurous consumer and encouraged by new and exotic taste combinations. The growing trend presents opportunity for manufacturers to continue to explore and champion new superfruits to maintain interest amongst health conscious consumers and this trend promises to sustain the momentum in the superfruit health juices market.

#### *Natural energy*

Another popular trend in the fruit juice market is the development of a new breed of energy drinks within the fruit juices category. Designed to raise energy levels in a more sustained manner these energy drinks combine natural ingredients such as ginseng and guarana. While ginseng has been used for over 2,000 years as a natural nutritional preparation to augment energy levels, ginsenosides, is a class of molecule found within ginseng. It prevents stress by keeping cortisol and other stress hormones under control. Both of these are categorized as adaptogens that combat both physical and emotional stress. A number of energy drinks featuring adaptogens are entering the market in recent years. For example, Acute Fruit™ 100 % Juice Energy Drink is a ‘carbon free’ orange passion fruit beverage that blends pure fruit juice with antioxidants and adaptogens to enhance energy levels, promote wellbeing and help fight stress. Other examples positioned as natural energy drinks giving ‘good, lasting energy and real nutrition, instead of that fleeting, unhealthy caffeine high’ are strawberry banana, berry boost and power punch.

Certified as organic these drinks contain proteins, vitamin B3 and B6, açai and ginseng and are being positioned in the market as healthier alternative to energy drinks which contain high levels of caffeine and sugar. The trend is providing opportunity for fruit juice manufacturers to capture the market of increasingly sophisticated and health conscious consumers by delivering differentiated energy proposition that are based on natural health and vitality.

### *Probiotics and prebiotics*

Probiotics are 'live microorganisms which, when administered in adequate amounts, confer a health benefit on the host' as defined by WHO. While prebiotics are defined as 'non digestible food ingredients that beneficially affect the host by selectively stimulating the growth of one or a limited number of bacterial species in the colon which have the potential to improve host health'(Ashwell, 2002).

Probiotics have been used to ferment foods from time immemorial and are known to not only improve gut health and immune system but these have also demonstrated positive impact in curing allergies, acute gastroenteritis, inflammatory bowel disease and even reducing the risk of colorectal cancer. Furthermore, these have been shown to relieve the symptoms associated with lactose intolerance. Similarly prebiotics also impact immune system positively and by inhibiting gut lesions such as adenomas and carcinomas these also reduce the risk of colorectal cancer. These are found in foods like garlic, onion, leeks and bananas and help in absorption of minerals like calcium and magnesium.

While presently being marketed as nutraceutical dairy-based products, a growing trend is incorporating these probiotics and prebiotics as a functional ingredient in fruit and vegetable juices. The naked probiotic 100% juice smoothie is an example of a probiotic juice that contains a blend of blueberry, apple and banana along with a probiotic strains called Bifidobacterium.

This growing trend is providing opportunity to manufacturers to capture the lactose intolerant consumers or those that seek an alternative to dairy products owing to taste preferences.

### *Soy and omega-3*

Research shows that consumption of soy products can reduce many chronic complications linked to diabetes, reduce the risk of heart disease and may even reduce the risk of cancer. Isoflavones found within soy are able to lower blood pressure and are considered to be favorable for bone health. Soy-juice drinks are the emerging health propositions in the market currently. For example Coca-Cola's Espana Minute Maid Sojaplus Fruit with Soya Protein and Grupo Leche Pascual's fruit flavored soja drinks ViveSoy Bebidas de Zumos de Frutas con Soja.

Similarly Omega-3 which is an essential fatty acid found in oily cold water fish like mackerel and salmon, dark green leafy vegetables, flaxseed oil and certain vegetable oils. Known to be an essential health ingredient is now being added to fruit juices, providing a tasty and convenient alternative to consumers to consume this ingredient in a drink format. An example of Fruit juice incorporating omega 3 is Sparky Wild Açai Berry which pairs omega-3 with a superfruit to convey an increasingly strong health positioning as it provides high levels of antioxidants with essential fatty acids in a fitting drink format.

### **Marketing to Kids**

The focus on childhood obesity is growing more than ever in recent years as the number of children classed as obese is gravely increasing. Carbonated soft drinks have increasingly come under attack as a key contributing factor to the cause because of their high sugar levels and in turn calorie count. As such a growing trend has been the positioning of fruit juices as a healthy alternative to soft drinks. Healthy options currently introduced by fruit juice are: 100% pure

juice for kids; natural, pure juice with no artificial sweeteners, or color; carbonated fruit juices for kids.

Generally juices are considered to be very healthy, more so the 100% juices. Therefore there is a growing trend in the juice market currently to position it to kids through fun packaging and attractive flavors and to parents who are keenly concerned for finding healthy juice alternatives with their children's health in clear focus. Examples of 100% juices for kids recently hitting the market are Calypso Juice Shots and Robinson's Fruit Shoot. These drinks are positioned as 100% pure orange juice containing no added sugar, artificial colors or artificial flavors and marketed as two shots of the juice being equal to one serving of fruit for the day. Their packaging are designed to fit children's lunchboxes and are approved by school. Convenient lunchbox friendly packaging is another mounting trend in the market to capture the young consumers as it makes the drink even more attractive to parents looking for practical and convenient ways to make their children's lunchbox as nutritional as possible.

### **Beauty Support Drinks**

The driver of the health and wellbeing trend in the fruit juice market is not just consumers' desire to have a healthy body but also to look great. As a result a new trend of beauty support drinks is growing in the market with products high in vitamin content and high in polyphenols being launched. The Japanese market is the pioneer of beauty support new product developments. Examples of products categorized as beauty support drinks launched in Japan are: Urutsuya (moisture and lustrous) which contains 500mg vitamin C and 500mg N-acetyl Glucosamine per bottle; Suppin Zakuro (natural beauty pomegranate) which contains 10mg of soy isoflavones and 1mg hyaluronic acid per pack helps skin whitening and moisturizing, along with prevention of osteoporosis and improving the physiology.

Beauty support is in principle an innovative marketing approach to promote juices as drinks that support 'total wellbeing'. To date functional juices have positioned themselves as being good for health and disease control. Beauty focus fast is gearing up as an extension to the functional positioning. Manufacturers are making use of the niche opportunity to attract image conscious consumers to the juices market by developing functional drinks that focus on enhancing the healthy appearance of skin, hair and nails.

### **Luxury Juices**

As the demand for more and more sophisticated products is increasing, juice manufacturers are focusing on developing luxury juices aimed to appeal to a growing number of fruit juice connoisseurs. These include organic and 100% natural products and fruit cordials, moreover to create a sense of nostalgic indulgence these premium products are positioned by emphasizing the provenance of ingredients and the use of traditional recipes. For example Belvoir Fruit Farms, UK use tradition and provenance to market their luxury drinks. Similarly another British brand Cawston Vale promotes the fact that their products are 'pressed, not processed' and that apples used in their drinks are picked at the very peak of the season which result in making of a superior product. With increasing consumer curiosity in food provenance, seasonal products and natural farming there is a growing trend in the market for locally produced products that position themselves as genuine and aimed for connoisseurs. There is also an upcoming trend of 'boutique' juices brands that specialize in supplying elite juices to upmarket retailers and the very premium restaurants.

Another element of the luxury trend is a 'gourmet' or experimental trend, opposite to the natural and pure positioning this trend caters to consumers desire to try fresh and exotic flavors and unusual ingredients from far-away countries. An example being JT Miss Parlor Concordia

which is a red grape juice drink and is lightly carbonated, it is positioned as a luxury drink for adults that offers a rich fruity flavor of concord red grapes and the stimulating sensation of light carbonation. Similarly Didier Goubet Organic Merlot Grape Juice is an organic alcohol free grape juice that uses the provenance of the grapes used to endorse the premium nature of the product by marketing it as ‘juice pressed from Merlot grapes coming from the finest organic Bordeaux vineyards’. This trend is becoming increasingly popular amongst the fruit juice manufacturers to develop products that derive esteem from their region of origin. By detailing about the fruit variety and the region from which the fruit is harvested, credibility is being built around the premium offerings.

### **Ethical Juices**

The growing concerns of consumers regarding the potential negative impact of processing of food, the influence of pesticides on human health and that of intensive farming on the environment has led to an upsurge in the demand for naturally grown food products. Retailers are championing their green credentials to gain consumers approval and the pressure is mounting on manufacturers to produce more environmentally friendly products. This has resulted in substantial increase in the number of ethical juice products brought to market recently, primarily organic fruit juices. For example the Wild Bunch & Co Beet It is a 100% organic juice positioned as a luxury juice which has a unique classy recyclable bottle. The product focuses on attracting a niche market of juice connoisseurs. Another example is the RDA Organic Sqquishy, an organic product with a health positioning for kids. Sold in an innovative pouch format to appeal to kids, the product has a closure valve (patented) that makes the drink ‘virtually spill proof’. Children can drink the product by squeezing the pack which makes it fun. The makers

claim the packaging to be extremely lightweight thereby creating minimal waste and thus promoting a positive ethical message.

Another aspect of the ethical trend impacting the juices market and guided by government legislation and retailer and consumer demand is greener packaging as a movement for saving the environment. The growing focus on corporate social responsibility has also resulted in retailers taking the environmentally responsible or 'green' stance which in turn is pushing the suppliers to fit their products with the retailers' 'green' philosophy. For example, the natural products champion, Innocent uses 100% recycled material for four of its fruit smoothies and claims that this packaging uses 20% less material than previous forms which in turn has reduced the bottles' carbon footprint by 55%. The trend is growing fast as it offers a win-win scenario for all, not just promotion of a positive ethical stance for the retailers and manufacturers for producing more environmentally friendly products, the reduced packaging in turn leads to reduced material and transport costs thus increasing product margins through reduced unit costs.

### **Opportunities and Threats**

As the section above outlines some key trends and prospects that have been / can be exploited in the fruit juice industry, other trends that offer potential opportunities for the industry to thrive along with their share of challenges include:

- Emerging markets growth
- Insecurity of supply/sourcing
- Bifurcation
- Volatility
- Convergence of categories

## **Emerging Markets Growth**

As highlighted in the figure 3, the compound annual growth rate of the global juice industry for the years 2011-2016 has been 5.1% with the highest growth occurring in the Asia Pacific region followed by Africa and Latin America. The emerging markets are providing vast opportunity for the juice industry as these markets are keen on following mature markets consumer behavior patterns and buy global brands. With disposable income in these regions increasing; urbanization making fruits readily available and people becoming more conscious of the health benefits of juices through marketing, emerging markets are providing significant opportunities in the form of increased demand of fruits by the processing industry, by opening up new markets for processors and leading brand as well as for retailers who can sell more expensive, high margin juices. However, the down side of the potential prospects could be in the mature markets where manufacturers may need to pay higher input prices and retailers would have to make a choice between margins and volumes.

## **Insecurity of Supply/Sourcing**

Economies of scale can be achieved in the market by concentrating the production of fruits and by exporting the fruit juice concentrates. This can help the processors to spread the risk if they invest in new production areas. Sourcing offers the opportunity to manufacturers to acquire from different regions and thereby be flexible in blending. It can also let retailers diversify with the entire juice category and sell different drinks.

However, sourcing may prove challenging if and when sustainability of supply is an issue. Like scenarios when fruits struggle for the share of acre with other crops. This may also result in problems for the processors with regard to their capacity utilization if the supply of fruits gets affected.

## **Bifurcation**

Bifurcation in the market place is emerging as a common phenomenon following the economic downturn. While on the one hand customers are looking for value for money or the most economical alternative, when they do want to spend they are keen on indulgent, top of the range products. This presents opportunities for processors who can benefit from the demand if higher selling price offsets the increasing costs. For manufacturers, in the form of private labels as retailers outsource, who in turn can benefit from the higher margins. The B-brands however are at a loss by up the trading or down trading by consumers.

## **Volatility**

Supply and prices vary from year to year as these are impacted by weather influences, diseases affecting the crops and local cost developments. However this volatility can guide farmers to increase stability by integrating long term contracts. Similarly processors can also integrate backwards and fix their revenues by way of contracts. For safeguarding themselves manufactures can source for long term and pass the costs on, while retailers can pass on the costs to consumers or can enter long term contracts.

The downsides however being that owing to volatility of the results, farmers might struggle for sufficient investments. Manufactures could also be faced with the choice of volume over margin or vice-versa by retailers.

## **Convergence of Categories**

The concept may involve mixing of fruit juices with water leading to lower selling prices; or combinations of different categories, giving rise to indulgent taste experiences. It may be about doing away with the negative aspects of juices like sugar by combing them with other beverages or adding positives like dairy. Convergence of categories may also relieve pressure if

an ingredient is short in supply. Thus by convergence farmers and processors can benefit if the demand of the new drinks are high. While volume impacts would be low on the one hand manufactures can benefit by the improved margins. Similarly retailers can also enjoy an upsurge in the margins.

The threat however in such a scenario is that the demand for fruits might decline owing to consumers trading down to nectars and juice drinks. Also processors might get impacted by the movement from 100% juices to new categories resulting from the various combinations.

### **Factors Affecting Consumers Juice Choices**

Kim et al., (2013); Pollard et al., (2002) highlight that health is not the only factor people are concerned about when making their food choices; in fact health focus is of limited significance to a lot of people. Hence it's important to understand other factors affecting food choices; which by and large are the factors that influence consumers' juice purchasing behaviour as well. These can be broadly categorized as economic and non-economic factors, psychological factors, cultural factors and lifestyle factors.

#### **Economic and Non-Economic Factors**

While economic factor as the terminology suggest is about the price sensitivity of consumers guiding their purchase decisions, it is a particularly important factor for people with low incomes. However, in current times, the influence of prices on food choices is becoming lesser and lesser, as the disposable incomes are increasing and consumers are switching from cheaper to more expensive food products (Izmiryan, 2003).

The number of non-economic factors on the other hand is growing, to include not just health but various other considerations like (Valin et al., 2014; Booth et al., 2001):

*Individual energy and nutrient needs* - The amount of energy, carbohydrate, fat, protein, vitamins and minerals needed differs between different age groups and between males and females. These variations are increasingly beginning to guide the type and specifications consumers' are opting for in their juices.

*Food availability* - Most fruits are grown in a particular season of the year, e.g. strawberries are harvested in summer. Buying products of seasonal fruits in season often ensures fresh availability at a lower price. Technology however in current times has allowed food availability to be all year round.

*Social considerations* - Human welfare and fair trading, where growers or producers in developing countries are paid a good minimum price to cover their costs, can be a high concern for some people and can have a powerful influence on the food choices such consumers make.

*Environmental considerations* – Similarly there are growing concerns amongst a section of consumers about the scientific intervention in the food chain. The resulting genetically modified (GM) products are formed by changing a plant, animal or micro-organism's genes or inserting one from another organism. These food products are labeled as scientific modification often has strongly influence on people's buying choices. Organic labelled food products also impact food choices in consumers as such foods are grown without the use of inorganic fertilizers, or pesticides.

*Advertising and other point of sale information* - Advertisements whether on the television, internet, radio, posters, magazines or newspapers often define consumer food choices as these provide information to consumers. Point of purchase information and product placement strategies also assist people in making their purchase choices.

## **Psychological Factors**

These are strong determinants of food choices people make and indicate the amount of satisfaction one derives from the sensory attributes of food products. Taste being considered to be the most important aspect in food selection followed by texture, colour, shape, form, size of pieces and temperature (Ganasegeran et al., 2012; Lyman, 1989). Preferences also develop based on social experiences and degree of a liking towards food; different people have different food preferences, but some foods are particularly popular or unpopular. The taste, texture or appearance of food products strongly impacts the consumers' food purchasing behaviour.

## **Cultural Factors**

Culture is widely known to influence food habits and thus often guides consumers' food decisions. Describing the relationship between culture and food habits, Frewer et al., (2013); De Irala-Estevez et al., (2000) suggests that food habits are standardized set of behavior as shown by individuals within one cultural tradition. As food also denote ethnicity, regional and national identity, a number of factors are considered unchangeable such as concept of meals taken, time of the day meals taken, or the number of meals in a day, how food is acquired and prepared, which foods are edible, and certainly how to eat the food.

While there is a view that culture and food habits are difficult to change and are more or less static, it is being increasingly recognized that socio economic environment, travel and immigration is bringing in continuous change and impacting food choices and consequently purchase decisions (Yang et al., 2015; Anderson, 2014).

## **Lifestyle Factors**

Lifestyle factors, in recent times are becoming increasingly important in describing how consumers make food choices and purchase decisions (Frewer et al., 2013; Grunert, 2006). Lifestyles define the way people express their personality in different aspects, including food selection. Market research companies are continuously developing lifestyle classification systems based on psychographics (attitudes and values based on psychology), sociology, theology, economics and politics with demographic and geographic data for marketing purposes. As lifestyle factors are emerging as one of the strongest stimuli in recent times that are impacting food choices and decisions.

## **Innovation in Fruit Juice Marketing**

Juice is a mature category; nonetheless it is one of the most innovative and competitive product segments in the food and drinks sector of the beverage industry. Driven by increasing consumer demand and with the use of advancing technology the market is expanding and a selection of innovations in the category are being rolled out (Baourakis et al., 2001). The top five countries in terms of NPD (new product development) in juices in 2013 were France, USA, China, UK and Germany. Their % introductions, in 2013 are depicted in the Figure 4, while Figure 5 highlights the % introductions in terms of flavor components of NPD in juice, in 2013.

These innovative ranges being launched in the market comprise of both products and packaging innovations. While a variety of innovative trends gaining popularity in the market in recent years have been discussed in Section 3 above, a few upcoming examples in both products and packaging categories include:

## **Product Based Innovations**

### *Tropicana Farmstand Tropical Green, US*

Launched by Tropicana in 2015, Farmstand Tropical Green is a 100% fruit and vegetable juice blend. The product is a good source of vitamins C and A as it comprises of carrots, spinach, kale, mango, banana and pineapple with no added sugar. It provides one serving of vegetable and fruit in every glass and is marketed as “a delicious way to get more vegetables.”

([www.tropicana.com](http://www.tropicana.com))

### *Marks & Spencer Active Health Raspberry, Redcurrant and Baobab Juice Booster, UK*

Using Baobab, a superfruit from Madagascar with multiple health benefits, this juice was launched in 2015. The product contain high antioxidants, vitamin C and A, and claims to be the first own-label product in UK. While it retails in 150ml bottle to offers consume a convenient way to grab “one of your five a day in a daily dosing format.”

### *Impressed Juices, Australia*

Australian-media personality Rachael Finch has launched a new range of cold-pressed fresh juices in the country called Impressed Juices. The line comprises of Ginger Ninja and The Works. The Works consists of celery, apple, kale, cucumber parsley, lemon and fennel as an interesting combination in terms of taste. Ginger Ninja includes carrot, apple, ginger and turmeric, and is marketed as having a ‘sweet and spicy taste’.

### *Kirin Sekai No Kitchen Kara Attakai Salty Lychee, Japan*

Taking inspiration from local drinking customs in Thailand where fruits are commonly had with salt, Kirin Beverage launched a new Salty Lychee juice in Japan in 2015. The product

is sold warm via vending machines and offers consumers a novel drinking experience of having salty fruit juice with its unique consumption method (hot).

#### *Mello Drinks, UK*

Mello Drinks has launched two melon-based juices: Watermelon and Cantaloupe Melon. Prepared by cold pressing the fruits to “capture the raw and natural goodness of melon”, the products are free from added sugars and preservatives. Cold pressing preserves the color, fresh taste and health benefits of the melons used in its juices and the products are marketed as, ‘fresh and refreshing’ for the watermelon variant, while ‘sweet and tasty’ for the cantaloupe melon juice.

#### *Harmless Harvest Dark Cacao and Cinnamon & Clove, US*

Harmless Harvest, a 100% raw coconut water manufacturer, in 2014 launched innovative formulas focusing on leveraging flavors from cacao and spices for ‘an optimal treat’ for consumers. These were the Cinnamon & Clove, and Dark Cacao variants. While Cinnamon & Clove gets its ‘peak flavor, aroma, and nutrition’ from the essential oils of clove and Korinteje cinnamon; the Dark Cacao variant’s ‘indulgent, revitalizing flavor’ comes from fusing chocolate with the ‘sweet nuttiness of coconut water’.

These product innovation examples are illustrated in Figure 6.

### **Packaging Based Innovation**

The table 1 outlines the percentages of the different types of launches in the 100% juice and juice drinks category for a period from 2010 to 2014 and highlights that new packaging is the strongest growing launch type.

While within the new packaging category convenience and products that appear fresh are the order of the day. Small formats, grab-and-go offerings that fulfill the shoppers' requirement for a quick, chilled fix are the popular variants (Table 2).

Examples of packaging based innovations include, *V8 Original 100% Vegetable Juice* that has been repackaged in a newly designed 64-fl oz bottle. The product is gluten-free, kosher certified and is pasteurized for finest quality. Providing two full servings of vegetables per portion, the juice is made from concentrate with added ingredients.

Another Example is *Chiquita Tropicals Pineapple Juice*. This 100% juice is a kosher- and Rainforest Alliance-certified product, containing vitamin C and added flavor. While it is free from added sugar, preservatives, fat, cholesterol, sodium, and gluten, it is non-genetically modified and retails in a 12-fl oz recyclable bottle.

## **Outlook to Future for Fruit Juices**

The juice sector has demonstrated a constant and dynamic growth mainly owing to changes in lifestyle patterns, inclination towards healthy food products and an increase in purchasing power. As a future outlook for the sector it can be envisaged that Asia will retain its place as the fastest-growing juice market in the world, with India's projected retail market compound annual growth rate of more than 18% followed by Indonesia (16% CAGR) and Malaysia (8.3%). The Asia Pacific region will be the one to watch for going forward as six out of the top 10 fastest growers, are expected to be from the region. Formulations that are exclusive to the region may get introduced to the rest of the world. For example China's rock sugar pear juice, or chrysanthemum and honeysuckle, which have properties of reducing body's internal heat, have potential to become popular in other parts of the world. Moreover similar innovation

around flavors can be marketed as an alternative to alcohol in markets with population looking for alcohol free options.

In the next five years, Europe is likely to continue to be the most innovative juice region, surpassing other markets by a wide margin in the total number of new product introductions. While the regions innovations may continue to focus on flavor blending, it can be expected to foray in the area of more drinks for adult consumers. The US market on the other hand can be expected to concentrate its efforts on reigniting innovation for the super-premium end of the business by focusing on the cold-pressed juice trend. Although it promises to be a popular trend in the market yet how marketers will overcome the challenge of convincing mainstream Americans consumer to pay more for a single bottle of juice than what they pay at present for a family-sized offering, remains to be seen.

Overall, the markets can be expected to show stronger performance in the next five years than in the last five. Analysts predict that the global markets would grow at 18% comprising of about 90 billion liters and sales of USD167 billion. This is expected to result from the robust volume growth in emerging markets that will drives the category overall. While the slow volume markets of Europe and North America will maintain revenue flow through high value juices. The market will see not just small independent brands but also big retailers committing to higher value juices, even quality private label making a foray into this space. Perhaps, more strategic alliances among second-tier companies could be formed in the future to benefit from globalization opportunities to bring the niche, expensive products into the mainstream like the juices with superfruits, vegetables, herbal ingredients, and advanced processing techniques.

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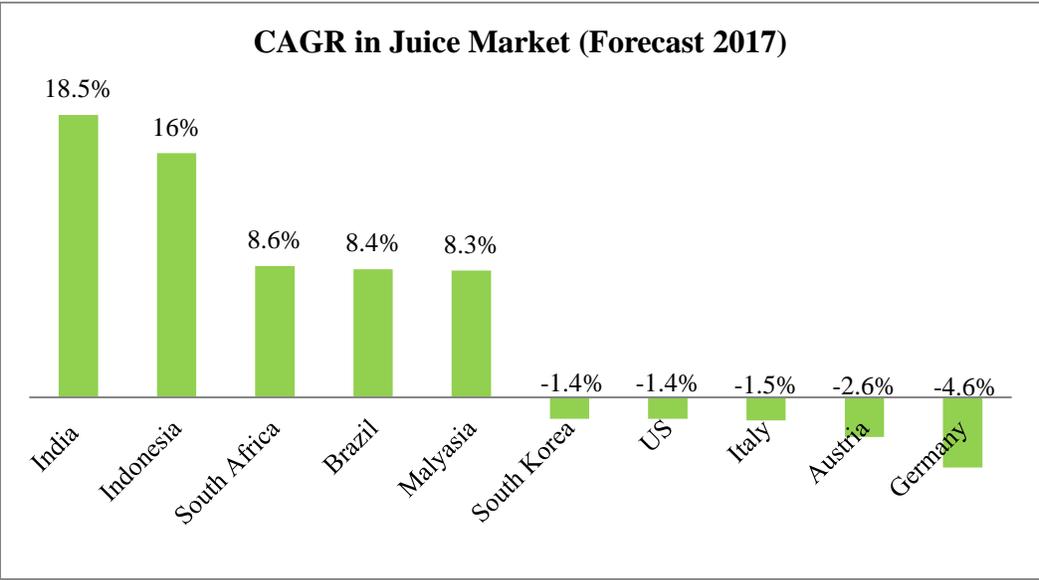
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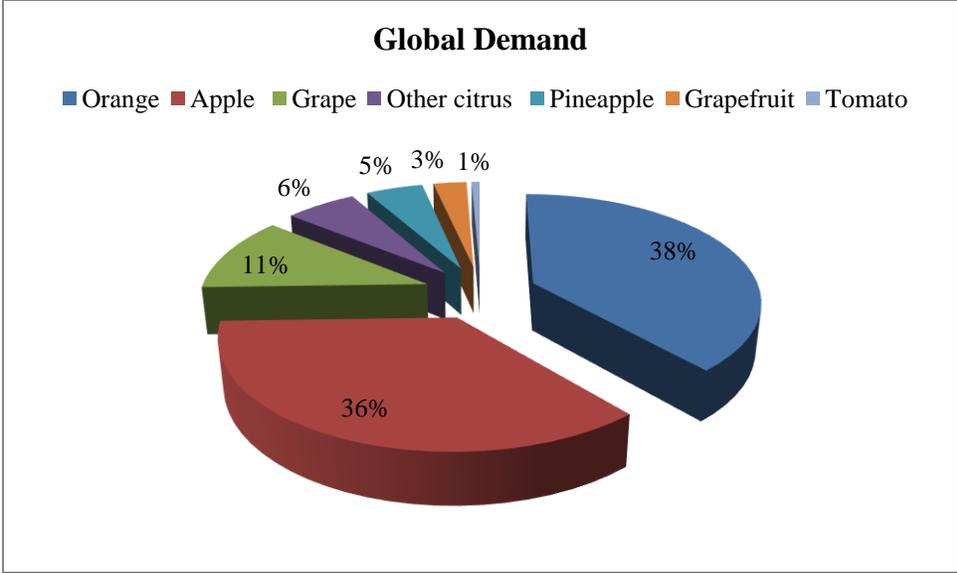
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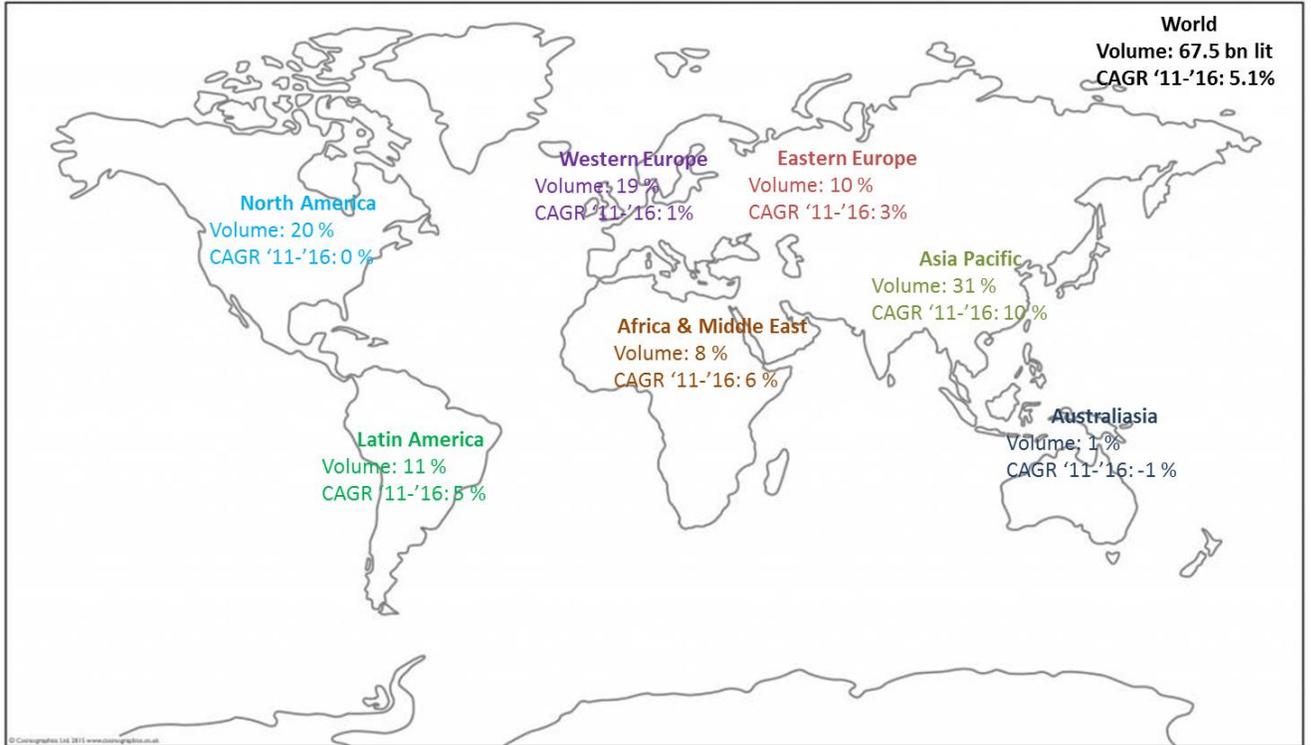
Data source: Mintel Report, 2013

Figure 1.



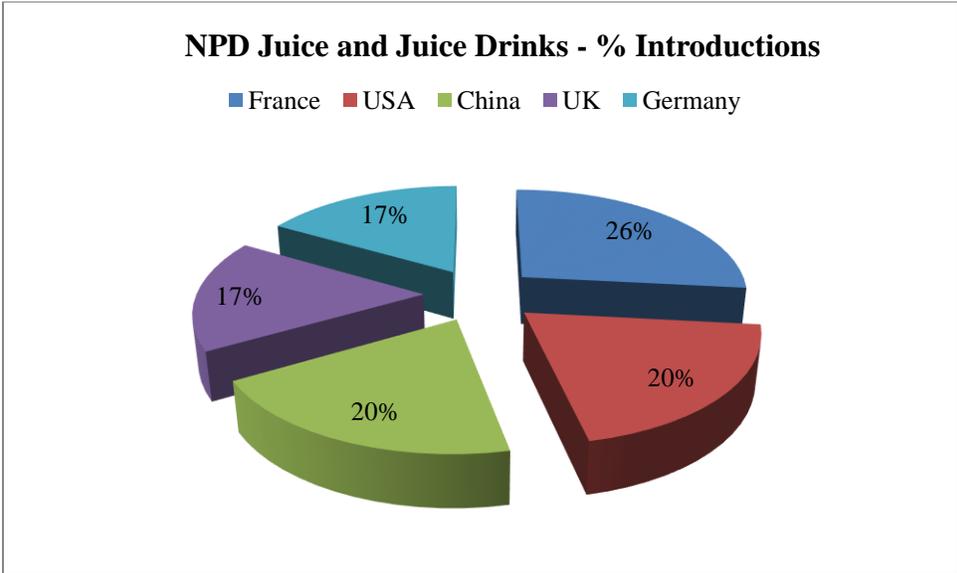
Data source: PRNewswire Report, 2014

Figure 2.



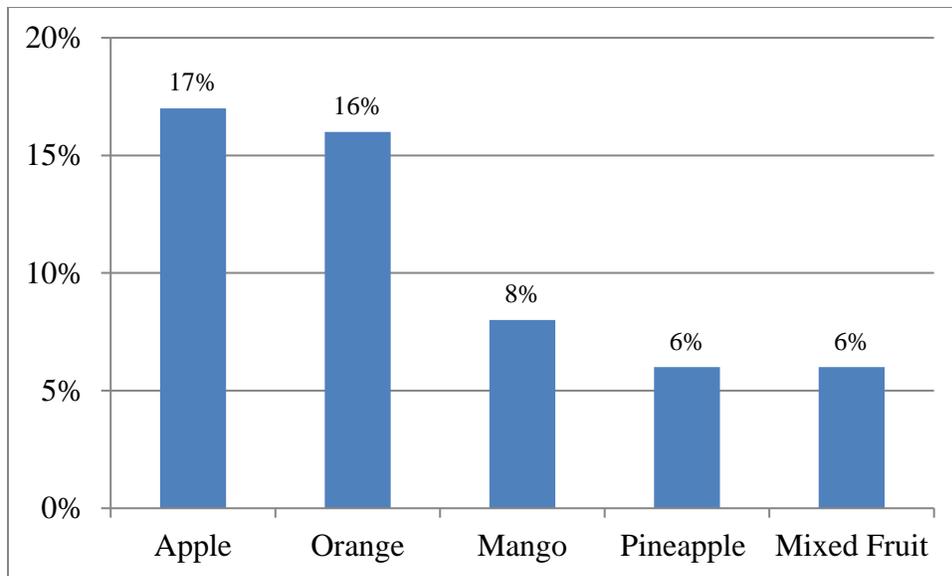
Data source: Euromonitor Report, 2012

**Figure 3.**



*Data source: Mintel Report, 2013*

**Figure 4.**



*Data source: Mintel Report, 2013*

**Figure 5.**



Source: Data Monitor Consumer Insights Report, 2015

Figure 6.

**Table 1: 100% Juice Launches, By Launch Type, 2010-14\***

	2010	2011	2012	2013	2014	Share of Launches 2010 -14	Change 2010 -14
	%	%	%	%	%	%	%
New Product	45.1	38.9	43.9	35.3	40.8	40.8	-4.3
New Variety/ Range Extension	38.0	30.2	26.5	32.4	28.6	31.2	-9.3
New Packaging	16.9	27.8	26.5	29.0	28.2	25.7	11.3
Relaunch	-	0.8	1.3	2.9	1.9	1.4	1.9
New Formulation	-	2.4	1.7	0.4	0.5	1.0	0.5

\*rolling year October 2009 – September 2014 (Source: Mintel Report, 2013)

**Table 2: 100% Juice Launches, By Storage Type, 2010-14\***

	2010	2011	2012	2013	2014	Share of Launches 2010 -14	Change 2010 -14
	%	%	%	%	%	%	%
Chilled	43.5	45.2	40.0	49.4	55.4	46.5	11.9
Frozen	0.4	2.0	-	0.4	-	0.6	-0.4
Shelf-stable	56.1	52.8	60.0	50.2	44.6	52.9	-11.5

\*rolling year September 2009 – July 2014 (Source: Mintel Report, 2013)