# Why Sugar-Free Products on the Menu? A Chef's Perspective

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**Abstract**

Food was a vital element of living. So many researchers have exposed associations between chronic diseases and food patterns. A food pattern rich in fruits, vegetables, and whole grain is beneficial to health, while a food high in sugar and fat was associated with increased risk of chronic diseases. Healthy catering was not just about taking off chips and cooked breakfasts from the menu. Nowadays many people prefer healthy foods but they must be made tasty and appealing. This is the main challenge of today's hoteliers. An important commercial opportunity exists - providing guests with healthier choices that look and taste good. It was important for the hospitality industry to grasp this market opportunity by offering healthier choices in terms of sugar-free recipes, which customers increasingly want to buy. This study was about the reasons if any which motivate chefs of the 5-star hotels of New Delhi to develop recipes which are sugar-free. The methodology chosen for this study was survey based, conducted among the executive chefs of five-star hotels in New Delhi. This study would be an attempt to identify the gaps between the demand and supply of sugar-free recipes created by chefs of the 5-star hotels. In addition to the collection of data through structured questionnaires, this study's research methods consisted of conducting in-depth interviews with the executive chefs of five-star hotels in New Delhi. The feelings expressed by the interviewees were examined during the discussions. Then the challenges faced by the chefs in relation to the modification of recipes to make them sugar-free and taste wise acceptable were also discussed. Based on the information collected from the respondents, they provided some general as well as particular suggestions with sugar free recipes offerings. This study brings out some answers to the factors defining trends followed by the chefs to make sugar free recipes in five star hotels.

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## 1. Introduction

Food is a vital element of living. Among all human behavior eating undoubtedly has the greatest cause on wellbeing. After breathing, eating is what we do regularly during a lifetime. A human can live without any lavish things of life but they cannot live on without food. Food is everything that, when taken in, serves to nurture, build and repair tissues, bring in energy or regulate body development (Dunhan *et al.,* 1992). Aside from its nutritional function, food is valued for its lusciousness and satiety effect as well as for different meanings attached to it by different individuals, or groups. So many researchers have exposed associations between chronic diseases and food patterns. A food pattern rich in fruits, vegetables, and whole grain is beneficial to health, while a food high in sugar and fat is associated with increased risk of chronic diseases (Kim & Joung, 2012). Type 2 diabetes, obesity, hypertension, and some heart diseases are the most common food-related diseases in India and worldwide.

Sugar-free foods (a commercial opportunity), healthy catering is not just about taking off chips and cooked breakfasts from the menu. Days of everything with brown rice are gone. Nowadays many people prefer healthy foods but they must be made tasty and appealing. This is the main challenge of today's hoteliers. Consumers are confronted almost daily with information about diet, nutrition, and health through the internet, magazines, and television. They are becoming increasingly conscious of, and interested in, the relationship between what they ate and their health. Food manufacturers and retailers have seized the opportunity to market 'healthy options' and sales are growing rapidly. Guests visiting hotels now are expecting healthy options in the menu. A recent study (Buidheann *et al.,* 2014) indicates that 97% of the guests think that they should eat only healthy foods even outside the home. More than half of the guests said it is the responsibility of the hotel to provide this choice. An important commercial opportunity exists - providing guests with healthier choices that look and taste good. It is important for the hospitality industry to grasp this market opportunity by offering healthier choices, which customers increasingly want to buy.

## 2. Materials and Methods

### 2.1 Research objectives

In today's competitive world of the hotel industry, the new innovative sugar-free recipes are a buzzword. The hotels, which identify and move with the changing demands of the consumer always have an edge in the industry. Stressing the need to have sugar free recipes and menus, this paper tries to find out the reasons for such demands. In order to study the factors influencing trends in recipes and menus as per the chefs with respect to sugar-free products.

### 2.2 Research methodology

A convenient random sample of 25, 5-star hotels of New Delhi were selected for the survey based study. A detailed questionnaire was used as a survey tool, which was developed after various deliberations with academicians and hoteliers. A personal meeting with executive chefs of the various hotels filled the responses. The questionnaire gathered information on various aspects of sugar-free products the hotels usually make available, their need, their demand and how it affects the chef's to evolve their recipes to sugar-free versions. The total sample size is of 25, 5-star hotels of the capital of India.

*2.3 Hypothesis:*

After the literature review, the following hypothesis is constituted to understand the objective of the study.
   a) Ho: Demand for Sugar-Free Products is not equally based on the parameters like customer demand, competition requirement, management initiatives and need for creative items on the menu.
   b) H1: Demand for Sugar-Free Products is equally based on the parameters like customer demand, competition requirement, management initiatives and need for creative items on the menu.

*2.4 Statistical tests*
   a) Cross Tabulation
   b) Correlation.
   c) One-way ANOVA.

The aim of the study is to find what factors are the drivers for making sugar free dishes available on the menu by 5-star hotels of New Delhi and further studying the relationship and effect of these factors on the sugar free products being offered by 5-star hotels. To carry out the findings  We first analyze the frequency count by doing cross tabulation between the sugar-free products being offered in the hotels which are the dependent variable and the various different parameters of customer demand, management initiative, competition requirement and need of chef's to be creative which are independent variables of the study. Then the correlation technique is used to identify if there is an existence of any relationship between the sugar-free products being offered by hotels and the parameters of customer demand, management initiative, competition requirement and need of chef's to be creative. Further, for hypothesis testing the use of One Way Annova is carried out on findings of the correlation status.

There is a major need in today's world to encourage customers to make healthier choices at restaurants. The various strategies, which influence customer decision making choices for healthier choices in restaurants are various like a major disconnect between healthy eating and restaurants, compensation, personal choices (S. Jones, 2010). Health and human well-being are both the resultant of an urban environment and further drivers of changes in the urban environment. One of the major key points is of sustaining healthy food environment in the urban environment to address the link between food consumption and obesity (L. Label *et al.,* 2012). The most immediate practice which can help customers in their dilemma of choosing healthy foods should be to include nutritional information in the menu which shall further help the customer in a long positive way to help him to make a healthy choice while eating out. Considering food environment influence in food choices Chen & Yang (2014) maintain that nutritious food access is critical to well being and quality of life of an individual. Individuals get motivated to make better health choices in the restaurant menus when eating out and want to surround themselves with nutritious choices. The study draws attention to the fact that if a customer is exposed to healthful food environment, he is facilitated in making healthful and nutritious choices. Wei & Miao (2013) in their study examine what influences the consumers' to make food choice in restaurants if there is a calorie disclosure on the menu. With the disclosure of the calorie on the menu, there were various different patterns of food choices were observed. This disclosure reflects that the restaurants with the perceived healthy image to a great length affects the psychological process of a customer and thus, in turn, affects the individual's food choices.

Foster & Lunn (2007) draw attention to certain facts about the nutrition diet in the study. There is a great problem being faced by the food industry with the gradual decline of energy expenditure by humans the problems of weight gain and obesity is in the rise. The availability of foods in the market is directly dependent on the nature of the demand of the customer. Now, with the demand for healthier food choices by the customer is pushing the food industry to make the same available. The effect of westernization of lifestyle and diet has led to a massive transition in nutrition amongst various communities. The study shows there is a positive connection between indigenous people's livelihood and various government policies turn communities benefit majorly by food consideration of their right to enjoy their culture (S. Damman *et al.,* 2008)

M. Trivedi *et al.,* (2015) emphasise that there is a major disconnect between the consumption behavior coming out from balancing behaviors as shown by consumers of health food and health concerns (e.g. major concerns being with fat, salt, and sugar elements in the food). This behavior was addressed by 3 main questions in the study:
   1) Do the specific segment of consumers in term of total health element, go ahead to balance their purchases between the regular version and healthy versions of products in each category?
   2) Is this behavior of balancing remaining consistent with different elements of concerns regarding health?

3) Last but not least: - Does the actual purchase behavior reflected with stated health orientation of the consumers.

The results of the study find significant connect between different health elements and balancing behavior across segments of the health-conscious consumers.

Sandron & Arvanitoyannis (2000) draws attention to the fact that nowadays the demand for low fat/ calorie products have increased in an attempt to address the health-related problems. Such products (low-fat/ calorie) were initially made and developed for certain people who had specific health problems and diabetic people and were very expensive. Now, days the food industry is facing a rigorous task of satisfying customers who want to lose or stabilize their weight and also for consumers who want to limit health problems. The challenge of the same is in developing products which pass the list of sensory acceptance and competitive pricing. In developing successful products the main emphasis is to successful replace fat and sugar by fat replaces and sugar substitutes. Also, it is of great importance that while developing such products the food industry has to be in agreement with the parameters laid down by strict legislation and food laws. They have a very crucial conclusion regarding sugar replacements which is a very challenging factor. These products can be accepted successfully if the sensory experience of customers related to these products. Only this can further ensure the continued market growth of products in which sugar is replaced. A study (Higgs, 2015) conducted on social norms, the author proposes that what other people are eating have a powerful effect on the behaviour of humans. As humans have a developed capacity that leads to learning from the behaviour of others are always trying to seek approval of others which they find rewarding. Also that eating norms yield to information regarding safe foods. Social norms to a great extent affect the intake and food choices made by individuals.

Durrani (2014) draws attention that it is no longer only fashion but compulsive need to eat out with today's generation and work culture scenario. This need leads to the fact that there has to be more awareness among customers about healthy diet when they eat out and to educate them to make appropriate food choices from a different type of diets available in the hotels and restaurants. It is valid that mainly customers tend to eat the healthiest when they are at home. When the customers are busy, traveling, celebrating they tend to eat unhealthy and energy dense foods. Although the hotel industry is shifting towards addressing various wellness and more holistic needs of customers, should also go beyond the wellness packages and manage customer health needs with reference to food products. It has to be noted that the hospitality industry is lagging behind when it comes to attention to dietary intake and nutritive quality of food to be served. There is a notable lack in the customized disease-specific diet offerings in the hotels. There is a need of change in approach followed by hoteliers in menu planning and implementation. The mindset of the hoteliers should be such that they reach to the demands of their customers and ensure that the actual nutrients recommendations are met in specific types of menus/dishes. Doing this shall facilitate the providers of such needs to capture and retain his or her customer in this competitive market.

Garaner et al., (2014) showed that the moods of consumers have a major impact on the ones preference for food. The mood of an individual defines his or her choice between indulgent and healthy foods. The study hardly reflects that negative mood choose to have indulgent foods and positive mood strives to choose healthy food alternatives. Understanding of the importance of healthy eating behaviors, the importance of healthy foods which reduce health problems and obesity and characteristics of healthy foods can help the food service managers to make useful strategies which can promote healthy food choices. Changing of ingredients or cooking methods by the food service professionals can lead to making healthier foods. In addition, healthy food is a very important marketing strategy which can be used by food service professionals to make a niche for themselves in today's competitive industry. It becomes imperative to develop strategic plans now to include healthy food in menus which can further provide the customers with sustainable healthy food options to cater to customer demand (Lee et al., 2011). A study by Ronana (2010) revealed that sugar-free beverages are highly accepted by the Korean customers. The consumers consume these drinks because of perceived weight management benefits and are also benefited by a high degree of enjoyment and fulfillment of their desire to have these drinks. The favorites of these drinks are mainly woman who rate them very high on all variables. The overall attitude when measured relative to these drives score very high on the study that reflected in the acceptance and popularity of the same. The consumer perceives sugar-free drinks as more healthy than the sugar-sweetened drinks.

As the no. of people who are eating away from home is increasing, it becomes imperative to provide the consumer to choose from healthier foods (Gopinath, 2009). According to the author, how can a consumer know what is healthy if no nutritional information is provided? Although when customers eat out, he is not fishing for nutritional information, if he is provided with the same, he will use it to his benefit to make healthy choices. The study claims

that till date no research has been conducted in which the offering of nutritional information at the time when the consumer is ordering the meal from the menu to determine whether this information will affect his menu selection. There are various consumer characteristics like consumer's knowledge of nutrition, his / her health consciousness and consumers personal engagement in health prevention measure that determines his selection of healthy items of the menu. The results of the study narrow down the factors in which consumers select meals which are taste, occasion, a dining companion, and their companions order. Influencing factors of eating out preferences by consumers in restaurants in six districts of Uttar Pradesh (India) were studies (Jabir & Nath, 2013). The study remarks that consumers usually eat out once a month, with entire friends or family for special occasions or when on holidays. People who are educated, young, employed and are usually from a dual income source indulge in eating out more often.

Mollen *et al.,* (2011) in their research with soy products conclude that health claims from the organization do not significantly affect or change the behavioral intention of the users who are already using those products. But on the other hand, such health claims definitely prompt and promotes usage of such products in non-users or occasional users and positively impacts the behavioral intentions of such customers. This leads us to believe that health claims are very effective with non-users or infrequent users to alter the consumer's attitudes, perceptions are further behavioral intentions which are closely and significantly related to public health agencies approvals and certifications.

The highlights of a study (Banterle & Cavaliere, 2014) are that obese/overweight people show more inclination towards nutrition claims of food and also that these people do not attach much value to other marketing attributes like flavor, price, and brand, to which a normal consumer are attracted to. Lifestyle and socio-demographic characteristics are the main reason for the rising rate of obesity and include that most vulnerable segment of the population is the one which is most susceptible to weight gain. (Sook Lee, 2011) in his study holds the view that all the three type of appeals namely taste, nutritional and emotional are used in the advertising of both healthy and unhealthy foods. By usage of nutritional appeals like (low-fat) sugar–free etc. helps in reducing the guilt of a consumer when eating unhealthy food. Taste appeal although features prominent effective regardless of what type of food is being advertised which further confirms to the fact that taste plays an important role both when consumers are making choices whether if healthy or unhealthy foods. All three types of appeals connect with people's motivation for food choices.

Astuti and Hanan (2012) suggest that eating out in a restaurant and cafes is a leisure activity which is common in a consumer society. This activity is just not limited to eating food but is also a representation of a social function like socialization, eating, working, discussing or waiting. Two key traits at the consumer level; like education level and state of hunger determine the effect of adverts on healthy eating choices of individuals (Forwood *et al* ., 2015). Individual health values define behavior intentions. Restaurant managers can play a key role by establishing out of the box marketing strategies which can lead to the motivation in consumers to make healthy menu choices. The restaurants should try to understand the health concerns of customers. Customers who value their health are indefinite control of their decisions regarding what to eat in the restaurants. These kinds of customers also accept the task of such food as healthy and thus do not compare it with the unhealthy/irregular versions of the same. Various other demographics variables like income, gender, and age have an impact on positive outcome expectations and healthy food choice intentions (Kang *et al.,* 2015).

A disease like obesity, cardiovascular and diabetes are highly prevalent diseases prevented by proper diet. Thus, it becomes very crucial for chefs and their restaurants to serve dishes, which are nutritionally balanced in the new ways of cooking techniques. There should be changes in the distribution of dishes in the menu and chefs should more closely understand the impact of critical ingredients like fat, salt, and sugar in the recipes they innovate and create. When creating new dishes with new procedures the chefs should not only be sensitive towards the sensations but also be critical evaluators of nutrition in the dish (Navarro *et al.,* 2012). In today's stressful world, consumers are all indulging in lifestyle modifications, which results in changing eating quantity and quality. Because of the changing lifestyles of customers, they are demanding the food industry to develop low calorie/ high fiber functional foods to replace the original versions of enriching food products. Industry to be able to produce such foods there has to be the incorporation of artificial sweetness and fat replaces which have the properties to decrease the calories largely and help in providing required health benefits. The study proves that highly acceptable results in terms of taste and texture can be produced by using dairy – multigrain composite flour with maltitol and FOS- Sucralose (as a sweetener) and PD (as fat replaces) (Aggarwal *et al.,* 2016).

Din *et al*., (2012) support the views that there is a major gap between the concerns/demands of customers regarding nutritional dishes/foods in the restaurants and responsiveness of the operators on certain issues regarding

this demand. Restaurant customers now days are expecting healthy food with complete nutritional information in full-service restaurants to help them make healthy choices. Although the processed food operators are very knowledgeable about the nutritional information in their products the restaurant operators lack big time in this, thus the apprehensive to provide the same. Staff training, menus, lab nutrient testing etc. pose a great hindrance in the willingness of restaurants to provide with healthy food with their nutritional information. Consumers who rate higher in EBBT (Expected Buying Behaviour Tendencies) are particularly receptive towards innovative and new product offerings. These types of customers are also not much concerned regarding trying new products but also need a variety in the products, which satisfies their need to seek variety. Such customers are also found to be not very price sensitive that makes them great potential customers to try new products. Such customers are also very quick to take any advantage to relate to promotional campaigns as they are better aware of the same through the advert media (Baumgarner & Steenkamp, 1996).

## 3. Results and Discussions

### 3.1 Analysis of the data

Cross Tabulation between hotels serving sugar free products and various factors with parameters of customer demand, competition requirement, management initiative or chef's desire for creating.

Table 1
Case processing summary

| | Cases | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Is Management Initiatives a reason for you to Develop Sugar-Free Recipes? * Do you offer Sugar-Free dishes in your menus? | 25 | 100.0% | 0 | .0% | 25 | 100.0% |
| Is Customer demand a reason for you to Develop Sugar-Free Recipes? * Do you offer Sugar-Free dishes in your menus? | 25 | 100.0% | 0 | .0% | 25 | 100.0% |
| Is Need for Creative and Novelty items on the menu a reason for you to Develop Sugar-Free Recipes? * Do you offer Sugar-Free dishes in your menus? | 25 | 100.0% | 0 | .0% | 25 | 100.0% |
| Is Competition Requirement a reason for you to Develop Sugar-Free Recipes? * Do you offer Sugar-Free dishes in your menus? | 25 | 100.0% | 0 | .0% | 25 | 100.0% |

Table 2
Cross-tabular calculation of management initiative reason to develop sugar-free recipes and offering of sugar-free dishes in the menu

| Is Management Initiatives a reason for you to Develop Sugar-Free Recipes? * Do you offer Sugar-Free dishes in your menus? Cross-tabulation | | | | | | |
|---|---|---|---|---|---|---|
| Count | | | | | | |
| | | Do you offer Sugar-Free dishes on your menus? | | | | Total |
| | | Yes | No | Sometimes | Always | |
| Is Management Initiatives a reason for you to Develop Sugar-Free Recipes? | Yes | 13 | 2 | 8 | 0 | 23 |
| | N0 | 0 | 0 | 1 | 1 | 2 |
| Total | | 13 | 2 | 9 | 1 | 25 |



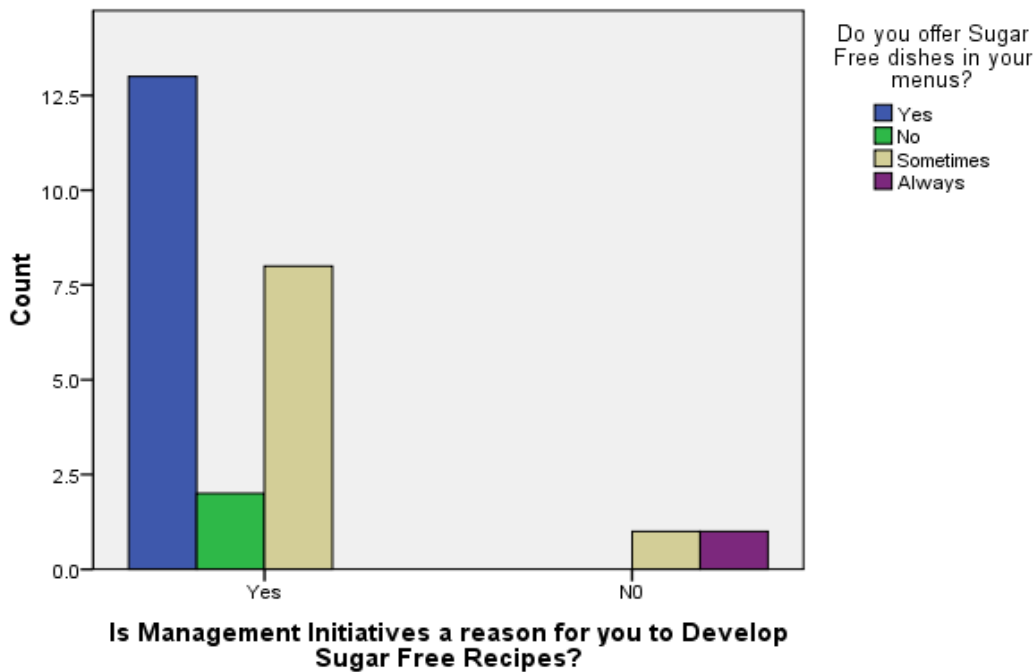Figure 1. Is management initiatives a reason for you to develop sugar-free recipes?

We observe that Management Initiatives are the major drivers for having sugar free dishes on the menu.

Parkash, G., & Khanna, K. (2016). Why sugar-free products on the menu? a chef's perspective. International Research Journal of Engineering, IT & Scientific Research, 2(7), 1-24. https://sloap.org/journals/index.php/irjeis/article/view/402

Table 3

Cross-tabular calculation of customer demand reason to develop sugar-free recipes and offering of sugar-free dishes in the menu

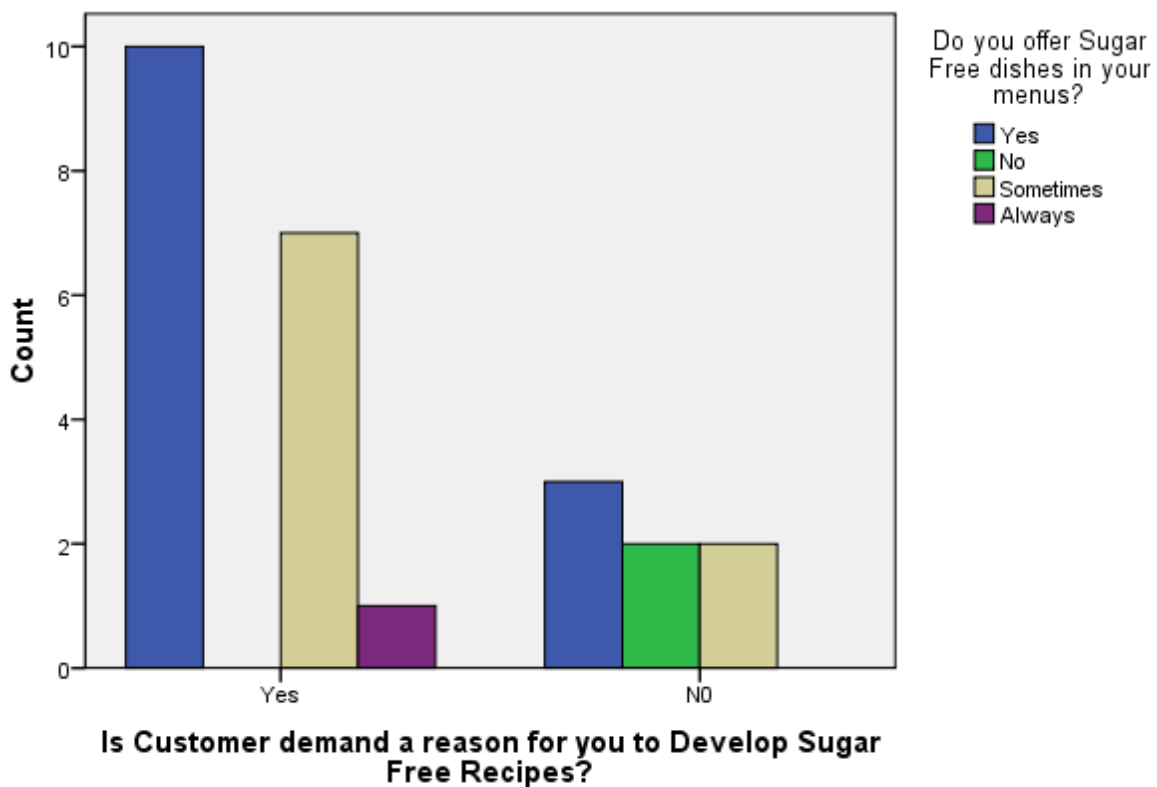| Is Customer demand a reason for you to Develop Sugar-Free Recipes? * Do you offer Sugar-Free dishes in your menus? Cross-tabulation | | | | | | |
|---|---|---|---|---|---|---|
| Count | | | | | | |
| | | Do you offer Sugar-Free dishes on your menus? | | | | Total |
| | | Yes | No | Sometimes | Always | |
| Is Customer demand a reason for you to Develop Sugar-Free Recipes? | Yes | 10 | 0 | 7 | 1 | 18 |
| | N0 | 3 | 2 | 2 | 0 | 7 |
| Total | | 13 | 2 | 9 | 1 | 25 |



Figure 2. Is customer demand a reason for you to develop sugar-free recipes?

The results reflect that 72% of the presence of sugar-free dishes on the menus can be a result of customer demands of such dishes.

Table 4

Cross-tabular calculation of need for creative and novelty items reason to develop sugar-free recipes and offering of sugar-free dishes in the menu

| Is Need for Creative and Novelty items on the menu a reason for you to Develop Sugar-Free Recipes? * Do you offer Sugar-Free dishes in your menus? Cross-tabulation | | | | | | |
|---|---|---|---|---|---|---|
| Count | | | | | | |
| | | Do you offer Sugar-Free dishes on your menus? | | | | Total |
| | | Yes | No | Sometimes | Always | |
| Is Need for Creative and Novelty items on the menu a reason for you to Develop Sugar-Free Recipes? | Yes | 5 | 0 | 2 | 1 | 8 |
| | N0 | 8 | 2 | 7 | 0 | 17 |
| Total | | 13 | 2 | 9 | 1 | 25 |

**Bar Chart**
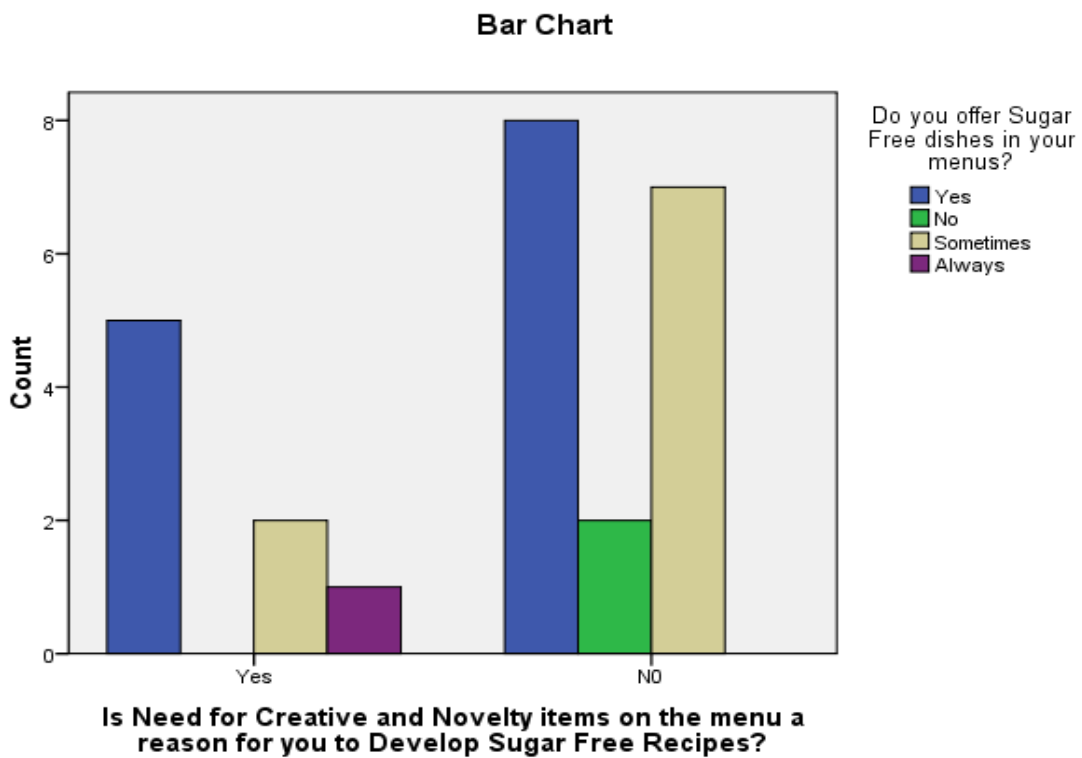


Figure 3. Is need for creative and novelty items on the menu a reason for you to develop sugar-free recipes?

From the above, we can conclude that the need for Creative and Novelty items has a very little influence on the presence of Sugar-Free dishes on the menu.

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Table 5

Cross-tabular calculation of Competition Requirement reason to develop Sugar-Free Recipes and offering of sugar-free dishes in the menu

| Is Competition Requirement a reason for you to Develop Sugar-Free Recipes? * Do you offer Sugar-Free dishes in your menus? Cross-tabulation | | | | | | |
|---|---|---|---|---|---|---|
| Count | | | | | | |
| | | Do you offer Sugar-Free dishes on your menus? | | | | Total |
| | | Yes | No | Sometimes | Always | |
| Is Competition Requirement a reason for you to Develop Sugar-Free Recipes? | Yes | 11 | 0 | 9 | 1 | 21 |
| | N0 | 2 | 2 | 0 | 0 | 4 |
| Total | | 13 | 2 | 9 | 1 | 25 |



Figure 4. Is competition requirement a reason for you to develop sugar-free recipes?

The cross-tabular tables above conclude that 84% presence of sugar-free dishes on the menu are the resultants of competition requirement among various hotels. Correlation between hotels serving sugar free products and a different parameter of customer demand, competition requirement, management initiative or chef's desire for a creativity.

Table 6
Correlations

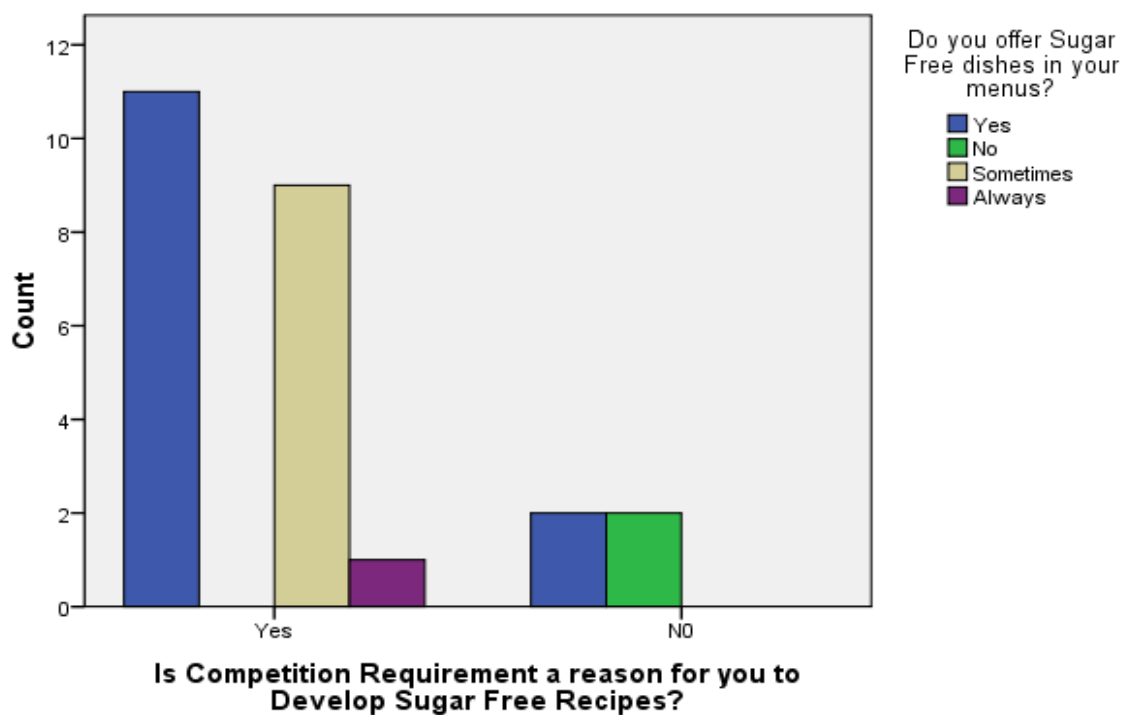| | | Do you offer Sugar-Free dishes on your menus? | Is Customer demand a reason for you to Develop Sugar-Free Recipes? | Is Competition Requirement a reason for you to Develop Sugar-Free Recipes? | Is Management Initiatives a reason for you to Develop Sugar-Free Recipes? | Is Need for Creative and Novelty items on the menu a reason for you to Develop Sugar-Free Recipes? |
|---|---|---|---|---|---|---|
| Do you offer Sugar-Free dishes on your menus? | Pearson Correlation | 1 | -.039 | -.180 | .458[*] | .030 |
| | Sig. (2-tailed) | | .855 | .388 | .021 | .885 |
| | N | 25 | 25 | 25 | 25 | 25 |
| Is Customer demand a reason for you to Develop Sugar-Free Recipes? | Pearson Correlation | -.039 | 1 | .214 | -.184 | .428[*] |
| | Sig. (2-tailed) | .855 | | .305 | .379 | .033 |
| | N | 25 | 25 | 25 | 25 | 25 |
| Is Competition Requirement a reason for you to Develop Sugar-Free Recipes? | Pearson Correlation | -.180 | .214 | 1 | -.129 | -.168 |
| | Sig. (2-tailed) | .388 | .305 | | .540 | .421 |
| | N | 25 | 25 | 25 | 25 | 25 |
| Is Management Initiatives a reason for you to Develop Sugar-Free Recipes? | Pearson Correlation | .458[*] | -.184 | -.129 | 1 | -.114 |
| | Sig. (2-tailed) | .021 | .379 | .540 | | .588 |
| | N | 25 | 25 | 25 | 25 | 25 |
| Is Need for Creative and Novelty items on the menu a reason for you to Develop Sugar-Free Recipes? | Pearson Correlation | .030 | .428[*] | -.168 | -.114 | 1 |
| | Sig. (2-tailed) | .885 | .033 | .421 | .588 | |
| | N | 25 | 25 | 25 | 25 | 25 |

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations were computed among offerings of sugar-free dishes on the menus and various factors affecting the presence of the same in the menu for 25, 5-star hotels. The results suggest that correlations between offerings of sugar free dishes on the menu and management initiative to develop sugar free recipes and customer demand as a reason to develop sugar free recipes and need for creative and novelty items on the menu were found to be statistically **significant with a value of Correlation Coefficient r = +.458 and+ .428, p<.05, two-tailed.** In general, the results point out that usually sugar-free dishes feature on the menus of the hotels where there is a strong management imitative regarding such dishes. Further, on if the customer demands sugar free dishes on the menu than the chefs are motivated to create innovative sugar-free recipes.

Table 7
One-Way ANOVA

| | | | | | | 95% Confidence Interval for Mean | | | |
|---|---|---|---|---|---|---|---|---|---|
| Descriptive | | | | | | | | | |
| | | N | Mean | Std. Deviation | Std. Error | Lower Bound | Upper Bound | Minimum | Maximum |
| Is Management Initiatives a reason for you to Develop Sugar-Free Recipes? | Yes | 13 | 1.00 | .000 | .000 | 1.00 | 1.00 | 1 | 1 |
| | No | 2 | 1.00 | .000 | .000 | 1.00 | 1.00 | 1 | 1 |
| | Sometimes | 9 | 1.11 | .333 | .111 | .85 | 1.37 | 1 | 2 |
| | Always | 1 | 2.00 | . | . | . | . | 2 | 2 |
| | Total | 25 | 1.08 | .277 | .055 | .97 | 1.19 | 1 | 2 |
| Is Customer demand a reason for you to Develop Sugar-Free Recipes? | Yes | 13 | 1.23 | .439 | .122 | .97 | 1.50 | 1 | 2 |
| | No | 2 | 2.00 | .000 | .000 | 2.00 | 2.00 | 2 | 2 |
| | Sometimes | 9 | 1.22 | .441 | .147 | .88 | 1.56 | 1 | 2 |
| | Always | 1 | 1.00 | . | . | . | . | 1 | 1 |
| | Total | 25 | 1.28 | .458 | .092 | 1.09 | 1.47 | 1 | 2 |
| Is Competition Requirement a reason for you to Develop Sugar-Free Recipes? | Yes | 13 | 1.15 | .376 | .104 | .93 | 1.38 | 1 | 2 |
| | No | 2 | 2.00 | .000 | .000 | 2.00 | 2.00 | 2 | 2 |
| | Sometimes | 9 | 1.00 | .000 | .000 | 1.00 | 1.00 | 1 | 1 |
| | Always | 1 | 1.00 | . | . | . | . | 1 | 1 |
| | Total | 25 | 1.16 | .374 | .075 | 1.01 | 1.31 | 1 | 2 |
| Is Need for Creative and Novelty items on the menu a reason for you to Develop Sugar-Free Recipes? | Yes | 13 | 1.62 | .506 | .140 | 1.31 | 1.92 | 1 | 2 |
| | No | 2 | 2.00 | .000 | .000 | 2.00 | 2.00 | 2 | 2 |
| | Sometimes | 9 | 1.78 | .441 | .147 | 1.44 | 2.12 | 1 | 2 |
| | Always | 1 | 1.00 | . | . | . | . | 1 | 1 |
| | Total | 25 | 1.68 | .476 | .095 | 1.48 | 1.88 | 1 | 2 |

*3.2 Results of Anova*

a) If management initiatives is a reason for developing a sugar free recipes then there is no standard deviation or standard error observed for selection with "yes or no", but for "sometimes" chef thinks so there is a deviation of 33% occur with an 11% of error and there is chance that the true mean value will fall in between 0.85 to 1.37.

b) If customer demand is a reason for developing sugar free recipes then there is no standard deviation or standard error observed for selection with "No", but for "Yes" chef thinks there is a deviation of 43% occur with a 12% error and there is a chance that the true mean value will fall in between 0.97 to 1.50. Also according to chefs for "sometimes" there can be a deviation of 44% with a 14% error and the chances are that true mean value shall fall in between 0.88 and 1.56.

c) If Competition Requirement is a reason for Developing a Sugar Free Recipes then there is no standard deviation or standard error observed for selection with "No and Sometimes", but for "yes" the chefs feel that there is a deviation of 37% with 10% error and there is a chance that the true mean value will fall in between 0.93 and 1.38.

d) If Need for creative and novelty items on the menu is a reason for Developing a Sugar Free Recipe then there is no standard deviation or standard error observed for selection with "No", but for "Yes" chef thinks there is a deviation of 50% which can occur with a 14% error and there is a chance that the true mean value will fall

in between 1.31 to 1.92. Also according to chefs for "sometimes" there can be a deviation of 44% with a 14% error and the chances are that true mean value shall fall in between 1.44 and 2.12.

Table 8
Test of Homogeneity of Variances

|  | Levene Statistic | df1 | df2 | Sig. |
|---|---|---|---|---|
| Is Management Initiatives a reason for you to Develop Sugar-Free Recipes? | 4.286 | 2 | 21 | .027 |
| Is Customer demand a reason for you to Develop Sugar-Free Recipes? | 2.070 | 2 | 21 | .151 |
| Is Competition Requirement a reason for you to Develop Sugar-Free Recipes? | 5.228 | 2 | 21 | .014 |
| Is Need for Creative and Novelty items on the menu a reason for you to Develop Sugar-Free Recipes? | 6.716 | 2 | 21 | .006 |

### 3.3 Summary table of Levene's test

a) This test is designed to test the null hypothesis that the variances of the groups are the same.
b) It is an ANOVA test conducted on the absolute differences between the observed data and the mean from which the data came.
c) In this case, Levene's test is, therefore, testing whether the variances of the four groups are significantly different.
d) If Levene's test is significant i.e. the value of Sig. is less than .05 then we can say that the variances are significantly different.

### 3.4 Test of homogeneity of variance

Here we can check with management initiative, competition requirement and creative and novelty items on the menu that data is homogenous but for customer demand data violets the one of the assumptions of ANOVA.

Table 9
ANOVA

|  |  |  |  | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|---|---|
| Is Management Initiatives a reason for you to Develop Sugar-Free Recipes? | Between Groups | | (Combined) | .951 | 3 | .317 | 7.490 | .001 |
|  |  | Linear Term | Unweighted | .939 | 1 | .939 | 22.193 | .000 |
|  |  |  | Weighted | .386 | 1 | .386 | 9.130 | .006 |
|  |  |  | Deviation | .565 | 2 | .282 | 6.670 | .006 |
|  |  | Quadratic Term | Unweighted | .468 | 1 | .468 | 11.058 | .003 |
|  |  |  | Weighted | .497 | 1 | .497 | 11.744 | .003 |
|  |  |  | Deviation | .068 | 1 | .068 | 1.596 | .220 |
|  | Within Groups | | | .889 | 21 | .042 |  |  |
|  | Total | | | 1.840 | 24 |  |  |  |
| Is Customer demand a reason for you to Develop Sugar-Free Recipes? | Between Groups | | (Combined) | 1.177 | 3 | .392 | 2.132 | .127 |
|  |  | Linear Term | Unweighted | .210 | 1 | .210 | 1.140 | .298 |
|  |  |  | Weighted | .007 | 1 | .007 | .041 | .842 |
|  |  |  | Deviation | 1.169 | 2 | .585 | 3.178 | .062 |
|  |  | Quadratic Term | Unweighted | .582 | 1 | .582 | 3.165 | .090 |
|  |  |  | Weighted | .497 | 1 | .497 | 2.702 | .115 |
|  |  |  | Deviation | .672 | 1 | .672 | 3.654 | .070 |

|  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
|  | Within Groups |  |  | 3.863 | 21 | .184 |  |  |
|  | Total |  |  | 5.040 | 24 |  |  |  |
| Is Competition Requirement a reason for you to Develop Sugar-Free Recipes? | Between Groups | Linear Term | (Combined) | 1.668 | 3 | .556 | 6.898 | .002 |
|  |  |  | Unweighted | .207 | 1 | .207 | 2.573 | .124 |
|  |  |  | Weighted | .109 | 1 | .109 | 1.355 | .257 |
|  |  |  | Deviation | 1.558 | 2 | .779 | 9.670 | .001 |
|  |  | Quadratic Term | Unweighted | .424 | 1 | .424 | 5.263 | .032 |
|  |  |  | Weighted | .327 | 1 | .327 | 4.055 | .057 |
|  |  |  | Deviation | 1.232 | 1 | 1.232 | 15.284 | .001 |
|  | Within Groups |  |  | 1.692 | 21 | .081 |  |  |
|  | Total |  |  | 3.360 | 24 |  |  |  |
| Is Need for Creative and Novelty items on the menu a reason for you to Develop Sugar-Free Recipes? | Between Groups | Linear Term | (Combined) | .808 | 3 | .269 | 1.220 | .327 |
|  |  |  | Unweighted | .415 | 1 | .415 | 1.882 | .185 |
|  |  |  | Weighted | .005 | 1 | .005 | .023 | .882 |
|  |  |  | Deviation | .803 | 2 | .401 | 1.819 | .187 |
|  |  | Quadratic Term | Unweighted | .800 | 1 | .800 | 3.629 | .071 |
|  |  |  | Weighted | .802 | 1 | .802 | 3.636 | .070 |
|  |  |  | Deviation | .000 | 1 | .000 | .002 | .966 |
|  | Within Groups |  |  | 4.632 | 21 | .221 |  |  |
|  | Total |  |  | 5.440 | 24 |  |  |  |

*The main ANOVA summary table*
The table is divided into two parts:
Part I: Between-group effects (effects due to the model – the experimental effect)
Part II: within-group effects (this is the unsystematic variation in the data).
The between-group effect is further broken down into a *linear and quadratic component* and these components are the *trend analyses.*
The between-group effect labeled Combined is the overall experimental effect.
Is Management Initiatives a reason for you to Develop Sugar-Free Recipes?
1) The sums of squares for the model (SSM) = .951
2) The degrees of freedom (df)= 3
3) The mean squares for the model (MSM) = .317.

*The sum of squares and mean squares represent the experimental effect.*
The row labeled within groups gives details of the unsystematic variation within the data (the variation due to Management Initiatives reason to Develop Sugar-Free Recipes and different offering on Sugar-Free products). It tells us about how much unsystematic variation exists:
Is Management Initiatives a reason for you to Develop Sugar-Free Recipes?
1) The residual sum of squares (SSR) = .889
2) The average amount of unsystematic variation, the mean squares (MSR) = .042

The test of whether the group means are the same is represented by the F-ratio for the combined between-group effect. The value of this ratio is 7.49.
The column labeled Sig. indicates the likelihood of an F-ratio the size of the one obtained occurring if there was no effect in the population. In this case, there is a probability of .001 that an F-ratio of this size would occur if in reality there was no effect (that's only a .1% chance!).
The observed significance value is less than .05 we can say that there was a significant effect of offering on Sugar-Free products due to management initiative.

*3.5 Trend analysis*

The overall effect of offering on Sugar-Free products was significant; we can now look at the trend analysis. The *trend analysis* breaks down the experimental effect to see whether it can be explained by either a linear or a quadratic relationship in the data.

1) In linear component, this comparison tests whether the means increase across groups in a linear way. For the linear trend, the *F-ratio* is 9.13 (weighted) and this value is significant at a .006 level. Therefore, we can say that as the offering on Sugar-Free increased from Yes, No then sometimes and always increased proportionately for the management initiative.

2) In the quadratic trend, this comparison is testing whether the pattern of means is curvilinear (i.e. is represented by a curve that has one bend. The F-ratio for the quadratic trend is non-significant (in fact, the value of F is less than 1, which immediately indicates that this contrast will not be significant).



Figure 5. quadratic trend

*The graph represents that*

In the initial years, the management initiative is a force that drives the chefs and later the chefs get into the habit of creating such dishes for the menu.
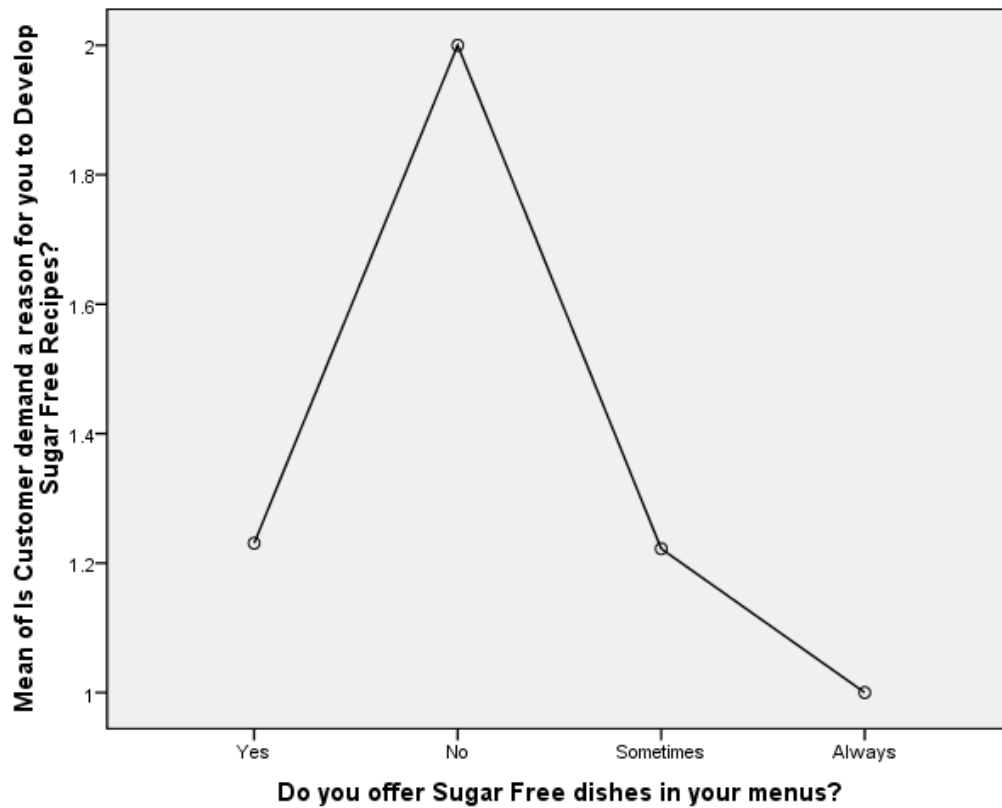
*Parkash, G., & Khanna, K. (2016). Why sugar-free products on the menu? a chef's perspective. International Research Journal of Engineering, IT & Scientific Research, 2(7), 1-24. https://sloap.org/journals/index.php/irjeis/article/view/402*

Figure 6. management initiative

*The graph represents that*

Initially, customer demand is a major factor, which contributes as a motivation factor for chefs to make sugar free dishes in the hotel menus, with this factor contribution consistently. Then after peeking up to a certain level, this reason has a declining effect to no effect later on.
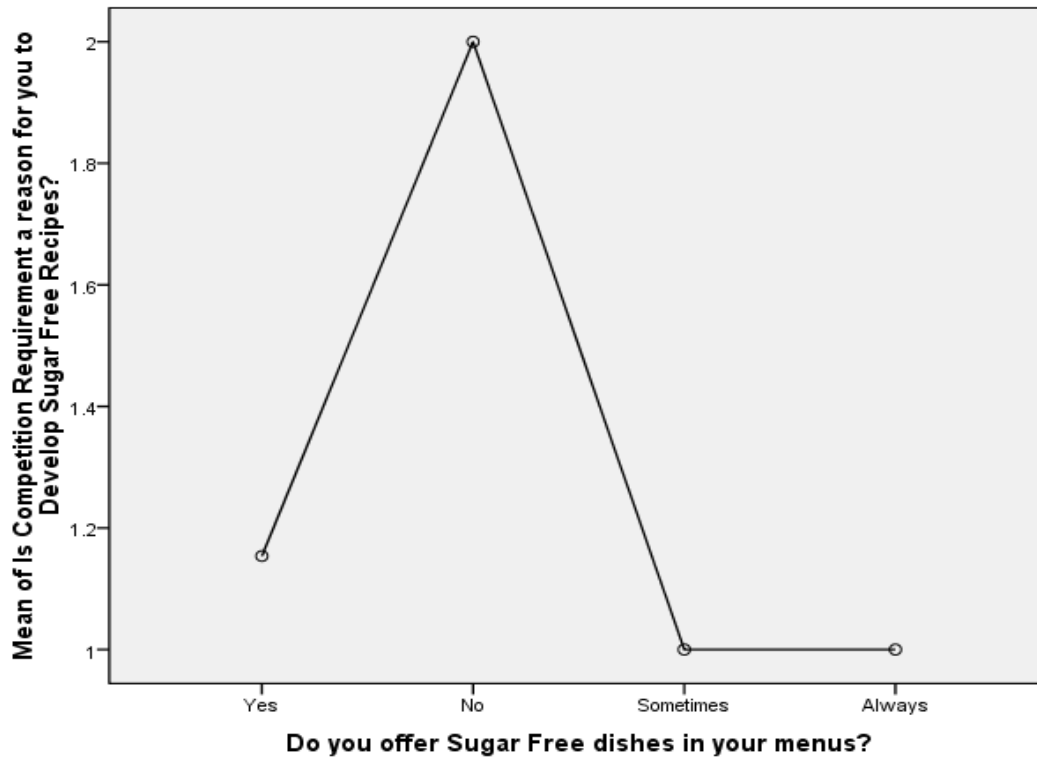
Figure 7. contributes as a motivation factor

*The graph represents that*

Competition requirement is a reason that initiates the chefs into making sugar free recipes initially up to a certain point. Later this reason shows a declining effect on the chefs leading to no effect in later stages to motivate chefs to make sugar free dishes for the menus of hotels.
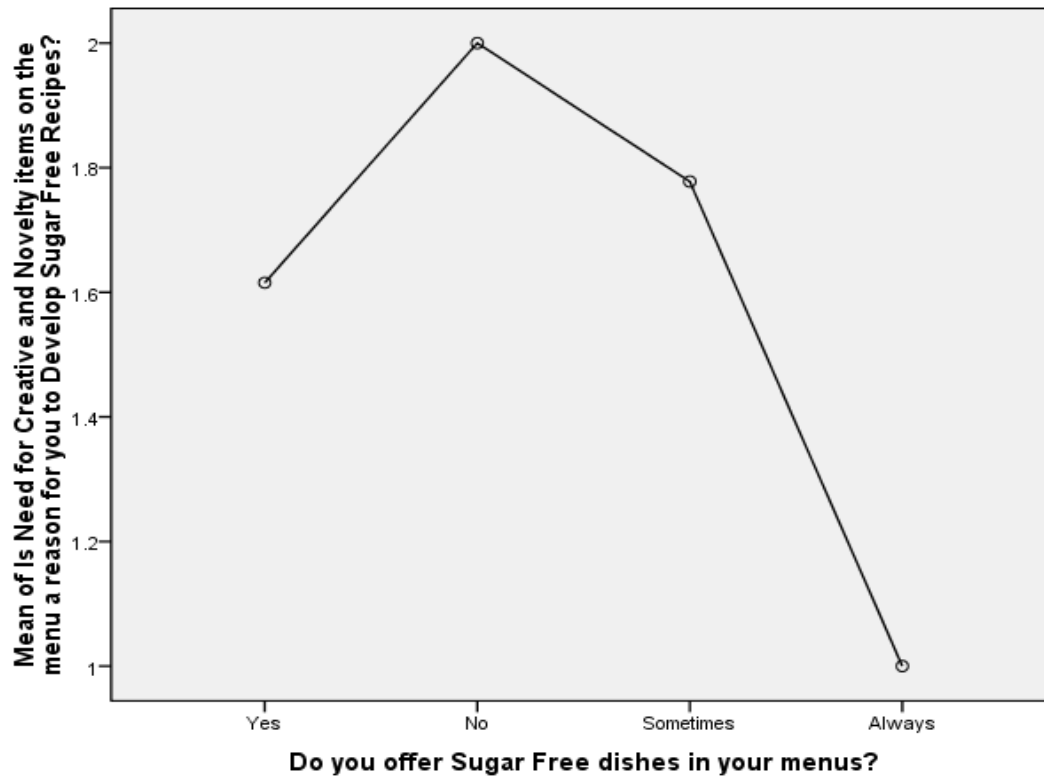
*Parkash, G., & Khanna, K. (2016). Why sugar-free products on the menu? a chef's perspective. International Research Journal of Engineering, IT & Scientific Research, 2(7), 1-24. https://sloap.org/journals/index.php/irjeis/article/view/402*

Figure 8. Competition requirement

*The graph represents that*

Sometimes the reason for making sugar free dishes in the menu can be triggered by the chefs need to give some creative and novel dishes to showcase his talent, which can be a motivating factor for some time, but later this motivation sees a declining fact to almost no effect of this reason on chef's desire to create some new sugar free dishes.

*3.6 Contrast coefficients*

This test is carried out to neglect chance factor and prove that the experiment causes an effect. Whether because of Management initiative, the offering of sugar-free products is happening OR offering of sugar-free products is happening without management initiative.
To conduct planned comparisons we use contrast:
    a) To test whether the Management Initiative was different from the groups offering of sugar-free F&B.
    b) To see whether the offering of sugar-free F&B made a difference to Management Initiative.

The table displays the contrast coefficients:

Table 10
Contrast Coefficients

| Contrast Coefficients | | | | |
| --- | --- | --- | --- | --- |
| | Do you offer Sugar-Free dishes on your menus? | | | |
| Contrast | Yes | No | Sometimes | Always |
| 1 | -3 | 1 | 1 | 1 |
| 2 | 0 | -2 | 1 | 1 |
| 3 | 0 | 0 | -1 | 1 |

a) When we do planned comparisons, we arrange the weights such that we compare any group with a positive weight against any with a negative weight.

b) The table of weights shows that contrast 1 compares the YES group against the NO, SOMETIMES and ALWAYS group, contrast 2 compares the NO group against the SOMETIMES and ALWAYS group and contrast 3 compares the SOMETIMES against ALWAYS group.

Table 11
Contrast Tests

| | | Contrast | Value of Contrast | Std. Error | t | df | Sig. (2-tailed) |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Is Management Initiatives a reason for you to Develop Sugar-Free Recipes? | Assume equal variances | 1 | 1.11 | .312 | 3.558 | 21 | .002 |
| | | 2 | 1.11 | .363 | 3.062 | 21 | .006 |
| | | 3 | .89 | .217 | 4.099 | 21 | .001 |
| | Does not assume equal variances | 1 | 1.11 | .111 | 10.000 | 8.000 | .000 |
| | | 2 | 1.11 | .111 | 10.000 | 8.000 | .000 |
| | | 3 | .89 | .111 | 8.000 | 8.000 | .000 |
| Is Customer demand a reason for you to Develop Sugar-Free Recipes? | Assume equal variances | 1 | .53 | .651 | .814 | 21 | .425 |
| | | 2 | -1.78 | .757 | -2.350 | 21 | .029 |
| | | 3 | -.22 | .452 | -.492 | 21 | .628 |
| | Does not assume equal variances | 1 | .53 | .393 | 1.347 | 15.595 | .197 |
| | | 2 | -1.78 | .147 | -12.095 | 8.000 | .000 |
| | | 3 | -.22 | .147 | -1.512 | 8.000 | .169 |
| Is Competition Requirement a reason for you to Develop Sugar-Free Recipes? | Assume equal variances | 1 | .54 | .431 | 1.250 | 21 | .225 |
| | Does not assume equal variances | 1 | .54 | .312 | 1.723 | 12.000 | .110 |
| Is Need for Creative and Novelty items on the menu a reason for you to Develop Sugar-Free Recipes? | Assume equal variances | 1 | -.07 | .713 | -.096 | 21 | .924 |
| | | 2 | -1.22 | .828 | -1.475 | 21 | .155 |
| | | 3 | -.78 | .495 | -1.571 | 21 | .131 |
| | Does not assume equal variances | 1 | -.07 | .446 | -.153 | 14.771 | .880 |
| | | 2 | -1.22 | .147 | -8.315 | 8.000 | .000 |
| | | 3 | -.78 | .147 | -5.292 | 8.000 | .001 |

Statistics are produced for situations in which the group variances are equal, and when they are unequal.

a) If Levene's test was significant then read the part of the table labeled does not assume equal variances.

b) If Levene's test was not significant use the part of the table labeled Assume equal variances.

*Parkash, G., & Khanna, K. (2016). Why sugar-free products on the menu? a chef's perspective. International Research Journal of Engineering, IT & Scientific Research, 2(7), 1-24. https://sloap.org/journals/index.php/irjeis/article/view/402*

The table tells us the value of the contrast itself, which is the weighted sum of the group means. This value is obtained by taking each group mean, multiplying it by the weight for the contrast of interest, and then adding these values together.

The table also gives the standard error of each contrast and t-statistic.

The t-statistic is derived by dividing the contrast value by the standard error.

$$t = 1.11/.111 = 10.00$$

Compare the t-test against critical values of the t-distribution. The significance value of the contrast is given in the final column and this value is two-tailed.

The first contrast as an example:

If we had used this contrast to test the general hypothesis that the *No, Sometime Always* groups would differ from the *Yes* group, then we should use this two-tailed value.

We tested the hypothesis that the *No Sometimes* and *Always* would increase libido above the levels seen in the placebo group: this hypothesis is one-tailed.

   a) Divide the significance values by 2 to obtain the one-tailed probability.
   b) Contrast 1, we can say that YES Chef offers sugar-free F&B significantly with the management initiative with respect to other groups p= .001.
   c) Contrast 2 NO group is similar to the other groups.
   d) Contrast 3 comparisons between *Sometimes* and *Always*. Chef Prefer *Always* to offer Sugar-free F&B with the management initiative.
   e) The significance of contrast 2 tells us that a high dose of Viagra increased libido significantly more than a low dose p(one-tailed) = .001

In summary, there is an overall effect of Management Initiative related to Chefs Offering of Sugar-free F&B. The planned contrasts revealed that Management initiatives significantly increased offering of Sugar-free F&B, t (8) = 10, p< .001.

### 4. Conclusion

This study brings out some answers to the research question related to the reasons that actually define and are the main motivating factors for the 5-star hotels of New-Delhi to make sugar free dishes available in the menu. The factors considered in the study were customer demand, competition requirement, management initiative, or chef's desire for a creativity. The conclusions reached in the study were that out of all the factors, management initiative is the prime factor that drives the chefs to give sugar-free dishes in the menu. The hotel's with active management which stays in closer association with changing demands in the food market are the ones which lead to defining the trends of food also in the market. The constant push by the management is the key role player to ensure that the creativity of the chef is working with their hotels is tapped fully and creates an example in the food industry by giving innovation sugar-free dishes, which is one of the latest needs of the customers eating out for various reasons.

*Scope for further research*

There are several questions that stay behind and that could be investigated in further research. One area that will continue to demand exploration is the question of how to bridge the gap between sugar-free, healthy food and people with limited budgets. Another question that demands further investigation is that of knowledge production and distribution related to these food items and the role that buyer power plays in these processes. These ideas brought out in this study might also inform other similar organizations, but they are particularly meaningful to five-star hotels as they generated them.

*Industry Implication*

The above research leads to defining various factors, which can be reasons for the chefs to create new sugar-free recipes. Identify the respective factors and their effects on the chefs the management of hotels can use the same information to become leaders in providing sugar-free dishes and create a niche for their product making them the market leaders in today's food world of innovative specific diet dishes.

*Statement of authorship*
The authors have a responsibility for the conception and design of the study. The authors have approved the final article.

## References

Aggarwal, D., Sabikhi, L., & Kumar, M. S. (2016). Formulation of reduced-calorie biscuits using artificial sweeteners and fat replacer with dairy–multigrain approach. *NFS Journal*, *2*, 1-7.

Ali, J., & Nath, T. (2013). Factors affecting consumers' eating-out choices in India: Implications for the restaurant industry. *Journal of foodservice business research*, *16*(2), 197-209.

Astuti, S., & Hanan, H. (2012). The behaviour of consumer society in consuming food at restaurants and cafes. *Procedia-Social and Behavioral Sciences*, *42*, 429-435.

Banterle, A., & Cavaliere, A. (2014). Is there a relationship between product attributes, nutrition labels and excess weight? Evidence from an Italian region. *Food Policy*, *49*, 241-249.

Baumgartner, H., & Steenkamp, J. B. E. (1996). Exploratory consumer buying behavior: Conceptualization and measurement. *International journal of Research in marketing*, *13*(2), 121-137.

Chen, X., & Yang, X. (2014). Does food environment influence food choices? A geographical analysis through "tweets". *Applied Geography*, *51*, 82-89.

Damman, S., Eide, W. B., & Kuhnlein, H. V. (2008). Indigenous peoples' nutrition transition in a right to food perspective. *Food Policy*, *33*(2), 135-155.

Din, N., Zahari, M. S. M., Othman, C. N., & Abas, R. (2012). Restaurant operator's receptiveness towards providing nutritional information on menu. *Procedia-Social and Behavioral Sciences*, *50*, 699-709.

Duhan, A., Chauhan, B.M. and Punia, D. (1992). Nutritional Value of Some Non-conventional Plant Foods of India. Plant for human nutrition. Volume 42, Number 3, 193-200.

Durrani, A. M. (2015). Types of diet and their nutritional impact on health. *Science & Technology*, *1*(1), 26-29.

Forwood, S. E., Ahern, A. L., Hollands, G. J., Ng, Y. L., & Marteau, T. M. (2015). Priming healthy eating. You can't prime all the people all of the time. *Appetite*, *89*, 93-102.

Foster, R., & Lunn, J. (2007). 40th Anniversary Briefing Paper: Food availability and our changing diet. *Nutrition Bulletin*, *32*(3), 187-249.

Gardner, M. P., Wansink, B., Kim, J., & Park, S. B. (2014). Better moods for better eating?: How mood influences food choice. *Journal of Consumer Psychology*, *24*(3), 320-335.

Higgs, S. (2015). Social norms and their influence on eating behaviours. *Appetite*, *86*, 38-44.

Hochradel, R., & Gopinath, M. (2009). Choosing Healthy Foods: the Consumer Behaviors. *ACR Asia-Pacific Advances*.

Ifrim, M. R. (2010). *An analysis of Korean customers 'attitudes and beliefs towards sugar-free beverages* (Doctoral dissertation, Master Thesis, KDI School of Public Policy and Management).

Jones, C. S. (2010). Encouraging healthy eating at restaurants: More themes uncovered through focus group research. *Services Marketing Quarterly*, *31*(4), 448-465.

Kang, J., Jun, J., & Arendt, S. W. (2015). Understanding customers' healthy food choices at casual dining restaurants: Using the Value–Attitude–Behavior model. *International Journal of Hospitality Management*, *48*, 12-21.

Kim, J., Jo, I., & Joung, H. (2012). A rice-based traditional dietary pattern is associated with obesity in Korean adults. *Journal of the Academy of Nutrition and Dietetics*, *112*(2), 246-253.

Lebel, L., Krittasudthacheewa, C., Salamanca, A., & Sriyasak, P. (2012). Lifestyles and consumption in cities and the links with health and well-being: the case of obesity. *Current opinion in environmental sustainability*, *4*(4), 405-413.

Lee, J. S. (2011). Learning from the Competition: Analysis of Advertising Appeals for Healthy Foods and Unhealthy Foods. In *A paper presented at the Advertising Division/Research of the 2011 Association for Education in Journalism and Mass Communication Conference August* (pp. 10-13).

Lee, S. M., Jin, N. H., Fowler, D., & Yuan, J. (2011). Characteristics and Perception of Healthy Food as Perceived by College Students.

Mollen, S., Rimal, R. N., Ruiter, R. A., & Kok, G. (2013). Healthy and unhealthy social norms and food selection. Findings from a field-experiment. *Appetite*, *65*, 83-89.

Navarro, V., Serrano, G., Lasa, D., Aduriz, A. L., & Ayo, J. (2012). Cooking and nutritional science: gastronomy goes further. *International Journal of Gastronomy and Food Science*, *1*(1), 37-45.

Sandrou, D. K., & Arvanitoyannis, I. S. (2000). Low-fat/calorie foods: current state and perspectives. *Critical Reviews in Food Science and Nutrition*, *40*(5), 427-447.

Stanner, S., & Woolfe, J. (2001). Catering for Health: a guide for teaching healthier catering practices. *Nutrition Bulletin*, *26*(2), 165-166.

Trivedi, M., Sridhar, K., & Kumar, A. (2016). Impact of Healthy Alternatives on Consumer Choice: A Balancing Act. *Journal of Retailing*, *92*(1), 65-82.

Wei, W., & Miao, L. (2013). Effects of calorie information disclosure on consumers' food choices at restaurants. *International Journal of Hospitality Management*, *33*, 106-117.

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