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RESEARCH ARTICLE

Consumer behavior for ready-to-eat salad food with special reference to working people

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ABSTRACT

In today's dynamic world, “time” has become more valuable than money. Moreover, due to an increase in the number of working people, demand for ready-to-eat (RTE) foods has also increased. Salad, which is the mandatory part of the daily diet, needs to be included on a daily basis. The regular consumption of salads in the diet has beneficial effects on human health. For a working group of people, it is difficult to carry salads at home or at their workplace on a daily basis. This study primarily focused on consumer preferences for RTE salads, with special reference to the working group of people in Pune. The main objective of this study was to understand the behavior of people toward salad preference in daily diet and to understand the preference of working professionals toward RTE salads if available readily. Researchers have focused on the current eating habits of salads in daily diet, at work locations during mealtime hours and on attitudes toward RTE salads. According to the research findings, working groups of people favor RTE salads along with different salad dressings. Furthermore, consumers also believe that these RTE salads are very convenient, time saving and easily accessible. Additionally, consumers have stated that RTE salads can be beneficial for catering to the taste of individuals.

Keywords: Consumer behavior, convenience food, RTE (Ready-to-Eat), salad dressings.

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INTRODUCTION

A balanced diet is important for the wellbeing of human health and leads to the establishment of dietary guidelines that promote healthy eating habits with increased serving sizes of fruits and vegetables. (Comert et al., 2020). Salad is a dish of raw vegetables and fruits often tossed with seeds or dressings (Grant, 2008). Salad constituents provide many health benefits. Fruits and vegetables provide essential nutrients such as fiber, vitamins and minerals (International std. organization, 1973). They are usually low in calories. Hence, they are used by people for weight loss and help in treating disorders and strokes. It contains no saturated fats or cholesterol. To improve palatability, salads are seasoned with different salad dressings (Pragya, 2010).

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Salad is a popular and growing segment of the food industry. It is regarded as a healthy food that can provide important minerals, vitamins and phytonutrients. The consumption of salad can effectively protect against a variety of illnesses, including cardiovascular diseases and cancer. As a result, the amount of salad consumed annually worldwide is increasing continuously. It has been reported that the average amount of salad consumed per person has increased by at least 25% in the last three decades. (Castro-Rosas et al., 2012). Changes in people's lifestyles, such as increased time spent working and engaging in leisure-related activities and a lack of cooking at home, have led to an increase in the demand for ready meals. Between 2008 and 2011, the total ready-meal market was estimated to grow at an average rate of 2.15% per year (Olsen et al., 2010).

Ready-to-eat (RTE) food refers to food prepared or cooked in advance or partially cooked in advance, with no further cooking or preparation required before being eaten. Ready-to-eat (RTE) food is also known as 'convenience food' or 'easily prepared food'. To enhance the ease of feasting, it is equipped, primarily through processing. This type of food is generally ready to consume without any additional preparation. It can be easily transported, may have a long shelf life or may also offer a blend of such convenient characteristics.

The term RTE is seldom applied to these individuals because restaurant food meets the same definition. RTE foods include convenient dried products; frozen foods such as only fry starters; cake mixes; shelf-stable foods; and snack foods. These foods mostly need not be cooked; they either need to be fried or heated. People store these products on pantry shelves or in a refrigerator or freezer until they are ready to use them. Although RTE food is convenient, some require special handling to ensure food safety. Initially, these foods were consumed by defensemen, disaster victims, trekkers, hikers, and hunters who needed food quickly and on the road. However, RTE food has become popular among the busiest people (mostly working groups of people) in modern cities.

Salad is an essential component of our daily diet. Since salad is a daily dietary requirement and due to increased urbanization, the consumption of ready-to-eat (RTE) food has increased mainly for convenience, time savings and other practical reasons. In the modern era, due to their busy lifestyles, people are least interested in cooking. The main aim of this study is to conduct and analyze market surveys regarding RTE salads. To determine consumer preferences for RTE foods. Additionally, we aimed to determine in which form consumers would prefer RTE salads.

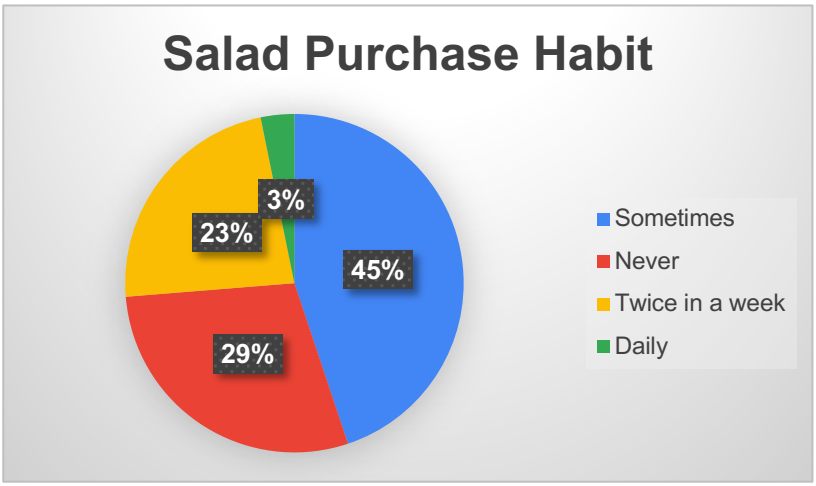
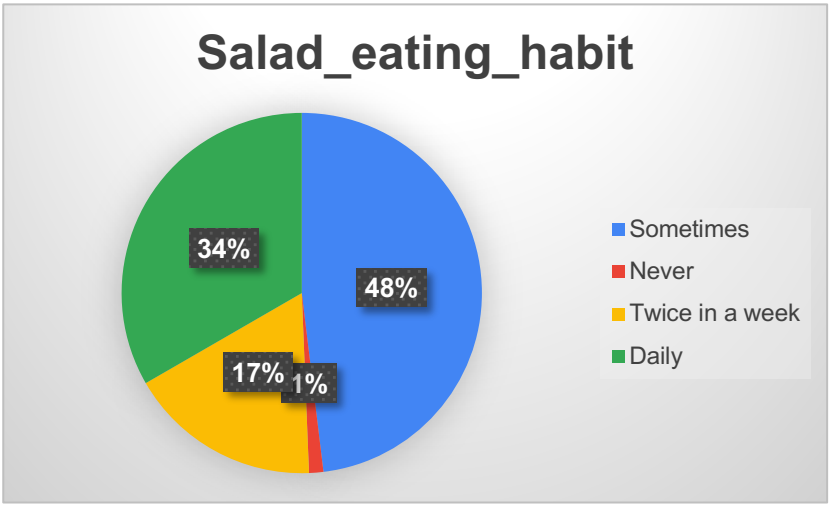
The main objective of this study was to understand the behavior of people toward salad preferences in daily diet and to understand the preference of working professionals toward ready-to-eat salad if available. Researchers have focused on the current eating habits of salads in daily diet, at work locations during mealtime hours and on attitudes toward RTE salads. The primary survey was conducted among a few working groups of people in Pune. A convenient sampling method was used. Feedback from 600 people was gathered through an online survey. The sample included mainly working groups of people from different working sectors. All the statistical analyses were performed manually using the chi-square test, Kolmogorov–Smirnov test, and cross-tabulation.

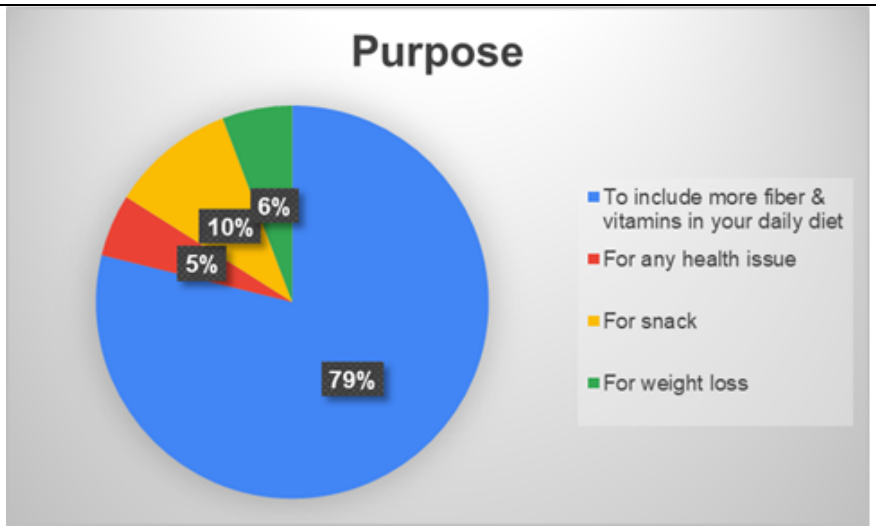
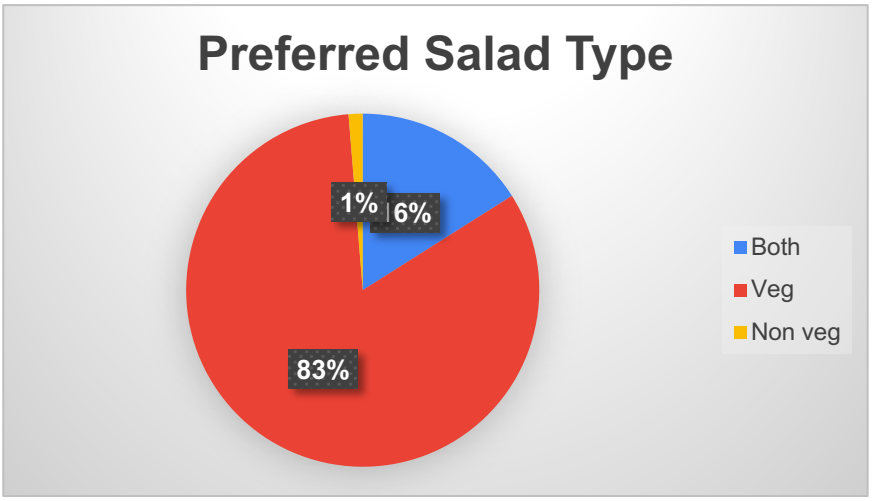
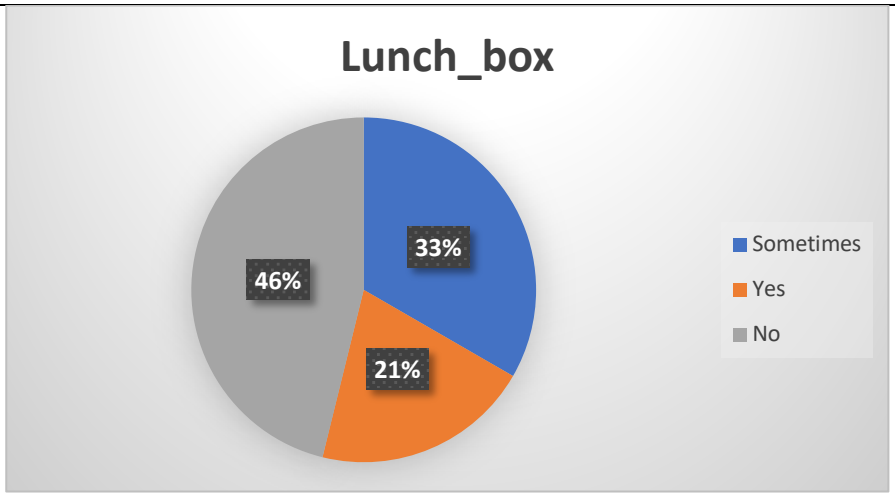
METHODOLOGY

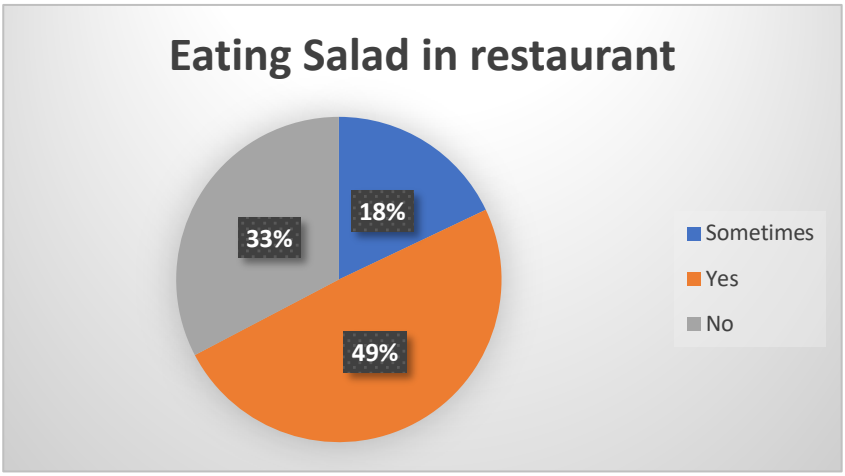
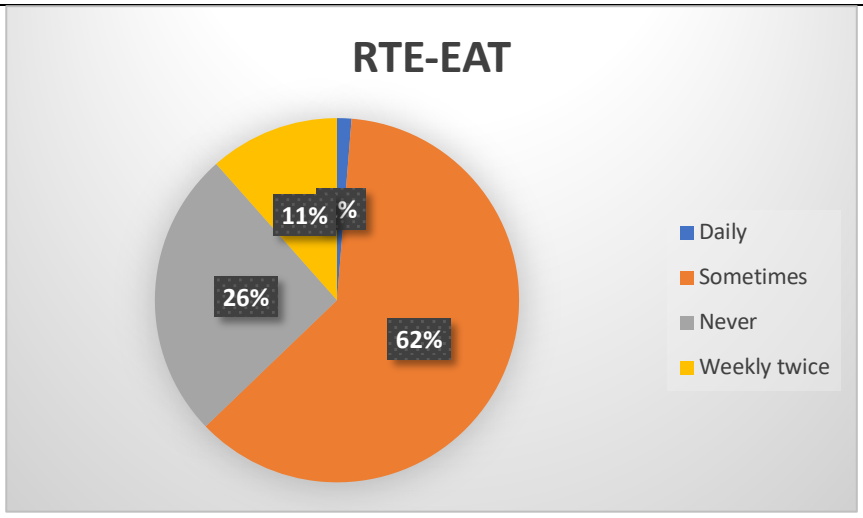
Sample size

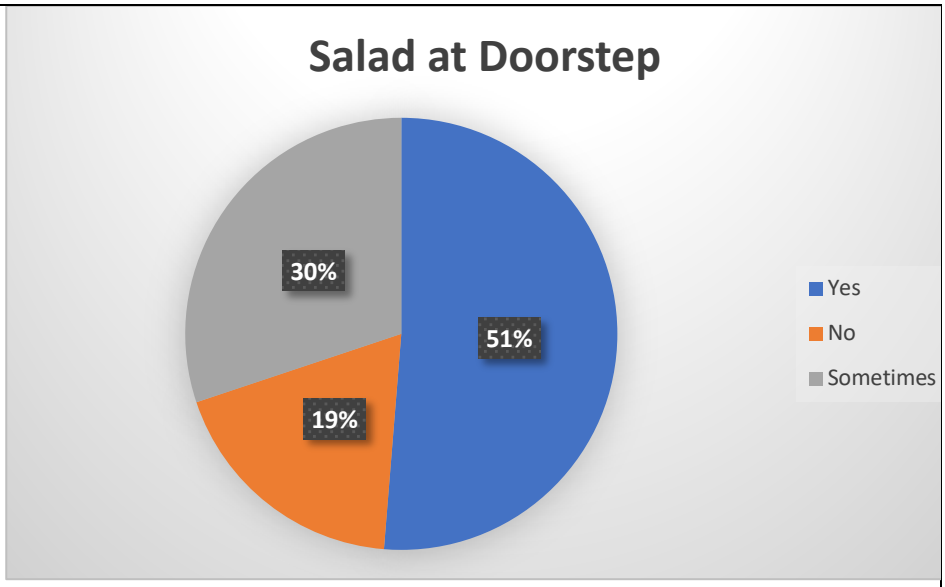
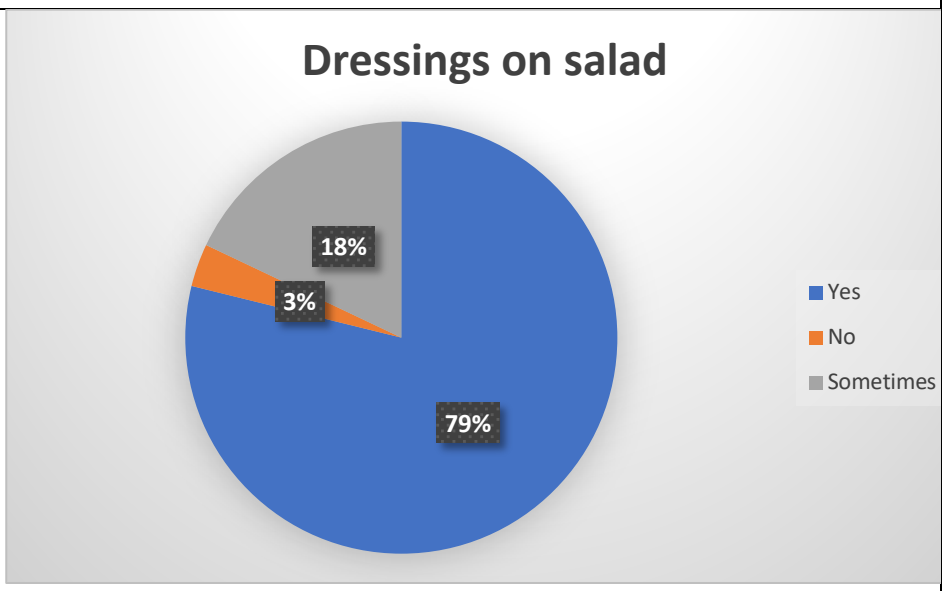
A sample size of 600 consumers from all working groups was taken into consideration for research purposes.

Data analysis

Questions	Results from Survey (Sample size - 600)
1. How often do you buy salads from the market?	
2. How often do you include salad in your daily diet?	

3. Why do you eat salad?	
4. What type of salad do you prefer?	
5. Do you carry a salad box along with your tiffin box on a daily basis?	

6. Do you eat salads at restaurants?	
7. Do you know about the concept of ready to eat foods?	
8. How often do you buy ready to eat foods?	

9. Would you prefer ready to eat salad, if available at your doorstep on a daily/weekly/monthly basis?	
10. Would you prefer salads served with different salad dressings?	

RESULTS AND DISCUSSION

This study addresses consumers' behavior toward Ready-To-Eat salad foods. The study revealed that out of 600 respondents, 452 (75.3%) were working professionals, 100 (16.7%) were students, 44 (7.3%) were housewives and 4 (0.7%) had their own businesses. The majority of the respondents were from a working background.

A study revealed that out of 600 people, 269 (45%) people sometimes purchase salad from the market, whereas only 19 (3%) people currently purchase salad on a daily basis from the market. In general, 139 (23%) people preferred to buy twice a week,

and 173 (29%) people never bought salad from the market. This indicates that the majority of people do not buy salad products on a daily basis due to time constraints.

A total of 600 people were found; 200 (33%) preferred to include salad in their daily diet, whereas the majority 287 (48%) preferred to include salad sometimes in their diet, 105 (18%) included salad twice a week in their diet, and only 8 (1%) never included salad in their diet. The majority of people do not eat salad products on a daily basis due to inconvenience and time constraints. The process of buying salad from the market and then processing it at home is very time-consuming because consumers do not prefer to eat salad on a daily basis.

The main objective behind developing a new RTE salad is to provide healthy food for a large population. Due to civilizations, people are focused on health issues. Similarly, a study revealed that almost 473 (79%) of the participants consumed salad in their eating habits to obtain more fiber and vitamins through their diet; for any health issue, 30 (5%) people consumed salad in their diet for health issues, 35 (6%) people consumed salad in their diet for weight loss, and 62 (10%) people consumed salad in their diet. This indicates that salad is eaten mainly to obtain more fibers, vitamins and minerals in the daily diet. Fruits and vegetables are the only food groups that provide abundant fibers, vitamins and minerals. Therefore, daily salad consumption is necessary, as all salads are combinations of fruits and vegetables.

A study revealed that 495 (83%) people preferred vegan salad to be included in their diet, only 8 (1%) people preferred to have nonvegan salad included in their diet, and 97 (16%) people preferred to include both vegan and nonvegan salad in their diet. This indicates that developing vegetarian salads would cater to consumers' needs more than developing nonvegetarian salads.

A survey revealed that 277 (46%) people did not carry salad in their tiffin box on a daily basis, 199 (33%) people sometimes took salad in their tiffin box, and 124 (21%) took salad in their tiffin box on a daily basis. This indicates that if an RTE salad is provided on the market, there would be an increase in the percentage of people wearing a salad in tiffin boxes on a daily basis.

The study highlights that out of 600 people, almost 299 (50%) people responded that they preferred to eat salad at restaurants, 103 (17%) people sometimes ate salad at restaurants, and 198 (33%) people did not prefer to eat salad at restaurants. In restaurants, salads are served in RTE form. Therefore, consumers prefer to eat salads at restaurants rather than at lunch boxes or at home. This shows that the majority of consumers need RTE salads.

A survey revealed that almost 369 (62%) people sometimes buy ready-to-eat (RTE) food from the market, 151 (25%) people do not prefer to buy RTE food from the market, and the remaining data show that 72 (12%) people buy RTE food twice a week and that 8 (1%) people buy RTE food daily. This reveals that the majority of people are ready to buy RTE foods.

The main objective of the study was to determine people’s response to buying ready-to-eat salad. Almost 309 (52%) people preferred to eat RTE salad products if available at doorsteps, 181 (30%) people preferred to eat RTE salad products on a daily/weekly basis, and only 110 (18%) people refused to buy RTE salad products. Most people are willing to buy ready-to-eat salad food if it is provided at the consumer's doorstep.

The survey data showed that 473 (79%) people were interested in wearing salad dressings, 107 (18%) people preferred dressing on their salad, and only 20 (3%) people did not prefer to use dressings on their salad. This finding showed that

consuming salad alone was not beneficial. Therefore, consumers prefer salads with different salad dressings because they exhibit improved taste and flavor.

Hypothetical Analysis:

Hypothesis 1:

Ho - People do not prefer to include salad in their daily diet.

Ha - People prefer to include salad in their daily diet.

Table 1: Chi-square test and Kolmogorov–Smirnov test for determining the preference of working groups of people for including salad in their daily diet

Description		Decisions
N		600
Normal parameters		
	Mean	150
	Standard deviation	103.23
Chi Square test		
	Chi-Square (test statistics)	213.14
	df	3
	alpha	0.05
	Chi-Square (table)	7.81
Kolmogorov–Smirnov Z		0.236
	Z (From table)	0.055

Inference: The results showed that the evaluated value (0.3116) was greater than the observed value (0.055), so we could reject the null hypothesis. As salad is a major part of the diet, it provides essential nutrients and has a high fiber content; therefore, people prefer to include salad in their daily diet.

Hypothesis 2:

Ho - People are not reluctant to purchase raw salad from the market on a daily basis.

Ha - People are reluctant to buy raw salad from the market on a daily basis.

Table 2: Chi-square test and Kolmogorov–Smirnov test for determining the daily preferences of working groups of people who purchase raw salad from the market

Description		Decisions
N		600
Normal parameters		
	Mean	150
	Standard deviation	120.4

Chi Square test	
Chi-Square (test statistics)	289.72
df	3
alpha	0.05
Chi-Square (table)	7.81
Kolmogorov–Smirnov Z	0.3116
Z (From table)	0.055

Inference: According to Table 2, according to the K-S test results, the critical value (0.236) is greater than the assumed value obtained from Table (0.055); hence, we can reject the null hypothesis. We can confirm that people are reluctant to purchase raw salad from the market on a daily basis because of their busy lifestyle and hygiene practices. Additionally, they do not have time to actually buy raw salads and process at home on a daily basis.

Hypothesis 3:

Ho - There is no significant relationship between salad purchasing behavior and salad eating habits in the current market.

Ha - There is a significant relationship between salad purchasing behavior and salad eating habits in the current market.

Table 3: Correlations [Salad purchasing behavior * Salad eating habit]

Variables	**Description**	Salad purchasing behavior	Salad eating habit
Salad purchasing behavior	Pearson Coeff	1	0.187
	Sig	-	0.19
	N	600	600
Salad eating habit	Pearson Coeff	0.187	1
	Sig	0.19	-
	N	600	600

Interpretation: r=0.187, n=600, alpha= 0.05

Inference: According to the results, the Pearson coefficient (r=0.187) is very low, which shows that there is a very weak linear correlation between salad purchasing behavior and salad eating habits. Additionally, people want to include salad in their daily diet, but due to their busy lifestyle, a large group of people are not able to purchase raw salad, which requires processing and is a very time-consuming process; therefore, consumers need RTE salads to save valuable time.

Hypothesis 4:

Ho - People are not reluctant to carry salad at the workplace in their lunchbox.

Ha - People are reluctant to carry salad at the workplace in their lunchbox.

Table 4: Chi-square test and Kolmogorov–Smirnov test for determining the preference of working groups of people to carry salad at the workplace in their lunchbox

Description		Decisions
N		600
Normal parameters		
	Mean	200
	Standard deviation	76.5
Chi Square test		
	Chi-Square (test statistics)	58.53
	df	2
	alpha	0.05
	Chi-Square (table)	5.991
Kolmogorov–Smirnov Z		0.111
	Z (From table)	0.055

Inference: According to the results, the evaluated value (0.111) is greater than the observed value (0.055), so we can reject the null hypothesis. This means that people do not carry salad at the workplace in their lunch box due to time constraints. For the working group of people, packing lunch itself is a time-consuming activity; therefore, due to time constraints, carrying salad in the workplace becomes an additional burden.

Hypothesis 5:

Ho - People do not prefer to eat salads at restaurants.

Ha - People prefer to eat salads at restaurants.

Table 5: Chi-square test and Kolmogorov–Smirnov test for determining the preferences of working groups of people to eat salads at restaurants

Description		Decisions
N		600
Normal parameters		
	Mean	200
	Standard deviation	98.02
Chi Square test		
	Chi-Square (test statistics)	96.07
	df	2
	alpha	0.05
	Chi-Square (table)	5.991

Kolmogorov–Smirnov Z	0.165
Z (From table)	0.055

Inference: According to the K-S test results, the critical value (0.165) of Table xxx is greater than the assumed value (0.0550); hence, we can reject the null hypothesis, and we can confirm that people prefer to eat salads at restaurants because they are easily available with variety and taste due to various dressing options.

Hypothesis 6:

Ho - There was no significant relationship between workplace salad eating habits in a lunch box and eating habits in a restaurant.

Ha - There was a significant relationship between salad eating habits in the workplace at lunch boxes and at restaurants.

Table 6: Correlations [Salad eating habits in the workplace * Salad eating habits in the restaurant]

Variables	Description	Salad eating habit at workplace	Salad eating habit at restaurant
Salad eating habit at workplace	Pearson Coeff	1	-0.157
	Sig	-	0.158
	N	600	600
Salad eating habit at restaurant	Pearson Coeff	-0.157	1
	Sig	0.158	-
	N	600	600

Interpretation: r=-0.157, n=600, alpha= 0.05

Inference: According to the results, the Pearson coefficient (r=-0.157) was very low. This shows that there is a very weak linear correlation between salad eating habits in the workplace and those in restaurants. Additionally, people are not willing to make salads at home or at the workplace, whereas they prefer to eat salads at restaurants rather than at home, mainly due to time, availability, variety, and taste.

Hypothesis 7:

Ho - People do not prefer ready to eat salad, if available at your doorstep, on a daily/weekly/monthly basis.

Ha - People prefer ready to eat salad, if available at your doorstep, on a daily/weekly/monthly basis.

Table 7: Chi-square test and Kolmogorov–Smirnov test for determining the preference of working groups of people to eat RTE salad, if available at your doorstep, on a daily/weekly/monthly basis

Description	Decisions
N	600
Normal parameters	
Mean	200
Standard deviation	100.9
Chi Square test	
Chi-Square (test statistics)	101.71
df	2
alpha	0.05
Chi-Square (table)	5.991
Kolmogorov–Smirnov Z	0.182
Z (From table)	0.055

Inference: From Table 7, it is observed from both test results that the K-S test-evaluated critical value (0.182) is greater than the assumed value obtained from Table 0.055. People want to include salads in their daily diet, but due to time constraints, it is not possible to do so. Hence, we can reject the null hypothesis, and we can confirm that people are ready to buy RTE salad from the market if it is readily available.

Hypothesis 8:

Ho - People do not prefer to buy salad with dressings.

Ha - People prefer to buy salads with dressings.

Table 8 Chi-square test and Kolmogorov–Smirnov test for determining the preference of working groups of people for buying salad with dressings

Description	Decisions
N	600
Normal parameters	
Mean	200
Standard deviation	240.4
Chi Square test	
Chi-Square (test statistics)	577.9
df	2
alpha	0.05
Chi-Square (table)	5.991
Kolmogorov–Smirnov Z	0.455
Z (From table)	0.055

Inference: From Table 8, according to the K-S test results, the critical value (0.455) of Table xxx is greater than the assumed value (0.055). Therefore, salad alone should not be as palatable as mixing salad with salad dressing. Additionally, this

approach improves the taste and flavor of existing salad and increases the acceptance rate of salad dressing. Hence, we can reject the null hypothesis, and we can confirm that people prefer to buy salad with dressings from the market.

Hypothesis 9:

Ho - There was no significant relationship between RTE salad and salad with dressings.

Ha - There was a significant relationship between RTE salad and salad with dressings.

Table 9: Correlations [RTE salad buying preference * Salad with dressings]

Variables	**Description**	RTE salad buying preference	Salad with dressing
RTE salad buying preference	Pearson Coeff	1	0.984
	Sig	-	4.944
	N	600	600
Salad with dressings	Pearson Coeff	0.984	1
	Sig	4.944	-
	N	600	600

Interpretation: r=0.984, n=600, alpha= 0.05

Inference: According to the results, the Pearson coefficient (r=0.984) was close to 1. This finding showed that there was a strong correlation between RTE-related salad buying preferences and preferred salad with dressings. Therefore, the obtained data support the goal of developing an RTE salad on the market.

CONCLUSION

There is a positive outlook toward the RTE food industry. This is because people do not have time to cook in their busy and hectic schedule. The study revealed that people are unable to purchase raw salads from the market on a daily basis due to their busy lifestyle. Processing salad and then eating has become a major task. Therefore, people are missing an important part of their diet at home as well as at the workplace. The study also revealed that consumers prefer to eat salad at restaurants rather than at home or at the workplace due to the ease of availability at restaurants. According to the research findings, people in the working group favor RTE salads and believe that consumers would prefer RTE salads along with different salad dressings rather than simple salads. Furthermore, consumers also believe that these RTE salads are very convenient, time saving and easily accessible. Additionally, consumers have stated that RTE salads can be beneficial for catering to the taste of individuals. Therefore, developing an RTE salad with a variety of salad dressings is essential for working groups. The development of RTE salads would cater to the need to incorporate salads into consumers' daily diet.

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