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A Study of Dietician and Nutritionist on Acceptance and Recommendation of Protein Bars in India

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ABSTRACT: With the changing and ever dynamic health & protein market, people are now moving towards healthy lifestyle due one of the primary reasons i.e., the pandemic which pushed people towards preventive health care. Brands have taken initiatives of introducing wide range of products such as protein bars with specific needs to support the nutrition requirement especially for their preventive care. Protein bars seems to have the right composition of healthy ingredients that are balancing between the health and taste. Multiple brands have launched Protein Bars in India like Max Protein bars, Yoga Bars, Mojo Bars, The Whole Truth Bars, Monsoon Harvest Bars, Mettle Bars, Gaia Bars, Nature Valley Bars, Kellogg's bars, Eat Anytime Bar, Cadbury Fuse Fit Snack Bar, Muscle Blaze Bars and many more. The present study brings insights about the dieticians and nutritionists on acceptance and recommendation of protein bars in India. For this, the researcher has reached out to 80 dieticians and nutritionist across India and out of this 71 were considered post data cleaning and labelling for this study. The statistical tools like simple percentage, Chi Square hypothesis testing are being used. Dieticians and Nutritionist play a vital role in shaping the protein bar industry, because of the dynamic nature of protein market and the ever-changing consumer behaviour, dieticians and nutritionist should learn, adopt, develop and be a part of this growing protein bar market that will bring in more transparency, trust and acceptancy among the consumers to shape the protein bar market of the future. The present study reveals the same. It is concluded that majority of the Dieticians / Nutritionists have validated the protein bar being the best use case consumption for their clients who are leading a hectic lifestyle or don't have time to cook or are seeking a nutritious protein rich mini meal on the go. Majority of Dietician / Nutritionist recommends protein bar to their clients as inferred in the research work.

Keywords: Protein, Dietician, Nutritionist, Awareness, Recommendation, Protein Bar

1. INTRODUCTION

Nutrition has always been destined to play important role in medical practice. Basis the history, it is believed that disease was caused by the imbalance of nature and bodily functions and that the main objective of medicine is to ensure health and wellness through diet and hygiene. The word "diet" was derived from the Greek word "diaita" which means a way of healthy daily living basis the selection of food, shelter from the natural environment. Dietetics and Nutrition have mentioned in the past that diseases, illness are mostly the result of heredity, environment and food. It is impossible to change heredity, it is very hard to change environment but relatively easier to change the food habits. It is said that Nutrition plays as important a role as drug, the Chinese saying "Medicine is given only when nutrition has failed", they believed that it is better to spend money on the cook than on the doctor. The present study brings some insight about the dietician,

nutritionist accepting, validating, and recommending the protein bars in India. For this, the researcher has reached out to 80 dieticians and nutritionist across India and out of this 71 were considered post data cleaning and labelling for this study. This study will help the protein brands, marketers, entrepreneurs, start-ups in India to identify the dietician, nutritionist viewpoint and insights on their awareness levels, the consumption of protein bars by themselves in their daily life, taste, health factor, convivence, usage factor, acceptability, and recommendation of protein bars to their clients. This study brings in more transparency and trust among the consumers through such dieticians and nutritionists to shape the protein bar market of the future.

2. REVIEW OF LITERATURE

IDG, 2019: The Research Report mentions "Health consciousness is particularly high in India. Only 1% say they are not interested in a healthy diet. 92% take responsibility for their own diets. Three quarters of the consumers (75%) claim to mostly eat healthily. However, just under two thirds (63%) feel that although their diet could be healthier, it is good enough. 42% admit to treating themselves regularly. This illustrates why it is so important for food companies to make eating healthier as easy as possible. Many see cost as a barrier. 72% of women and those aged 18-34 believe that eating healthily is more expensive. Improving the nutrition of mainstream products is a powerful way to overcome this perception."

MELODY M. BOMGARDNER, 2015: The Research Report mentions "The tenet that protein is a cornerstone of a healthy diet, that it helps us feel full and more satisfied, remains constant. It used to be that supplemental protein was something only bodybuilders were keen on. But now, even most regular-shaped eaters report they are looking to add more protein to their shopping carts. The macronutrient is super hip thanks to low-carb diet trends and claims that protein can help build lean muscle, keep you full longer, and even help you lose weight."

Mintel, 2014: This report states that "Protein continues to gain traction globally, establishing itself as more than simply a recommended part of meals." Protein is now also known for its links to satiety and hunger and of course it continues to encourage use of protein as weight management tool. Most of the brands across globe are including protein in their formulations to achieve a balance meal. There is also buzz created around the new source of protein – e.g., plant-based diet, vegetarian protein.

Mahajan, 2015: This report states that "A PROtein consumption in Diet of adult Indians, a consumer survey (PRODIGY) was conducted in seven major cities in 1260 respondents across India in order to assess the consumer understanding of protein in their day to day life. It was observed that around 9 out of 10 consumers had a diet deficient in proteins. This was regardless of the gender and the socio-economic group A and B interviewed."

3. OBJECTIVES

- 1. To highlight the awareness among dieticians and nutritionist towards Protein Bars.
- 2. To identify the taste acceptability among dieticians and nutritionist towards Protein Bars.
- 3. To analyse the relationship between awareness of Protein Bars and recommendation of Protein Bars for their clients.
- 4. To identify and analyse on-the-go convenient factor among dieticians and nutritionist towards Protein Bars for their clients.
- 5. To identify and highlight the consumption occasion of Protein Bars.

4. HYPOTHESIS

To understand how receptive the dietician and nutritionist are towards Protein bars awareness level and recommending it to their clients.

H0: There is no association between Awareness of Protein Bars and recommendation of Protein Bars for dietician / nutritionists' clients.

H1: There is an association between Awareness of Protein Bars and recommendation of Protein Bars for dietician / nutritionists' clients.

5. RESEARCH METHODOLOGY

- **5.1 Research area:** Dieticians and nutritionists who are consulting and practising the profession of dietician and nutritionist in a hospital or clinic of their own, these were selected random, and information was collected with the help of structured questionnaire and through Google Forms.
- **5.2 Sample size:** Sample size was circumscribed only to 71 prospective wherein out of 80 respondents, 3 Respondents were duplicate, 6 Respondents there were having missing values. Post the filtering and data cleaning in IBM SPSS Statistics 25 Software, we will be analysing 71 respondents' data for our research.
- **5.3 Data collection:** The primary data with the help of structured questionnaire were collected using Google Forms. The Secondary research included an exhaustive search of relevant publications such as company annual reports, financial reports and proprietary databases.
- **5.4 Data analysis method**: The research Data has been classified into two types Descriptive & Inferential Analysis. The data has been analyzed using IBM SPSS Statistics 25 Software.
- **Descriptive analysis:** The simple percentage method has been used to calculate the frequencies and has been represented by using Pie Chart.
- **Inferential analysis:** Inferential analysis has been used to derive the logical conclusions of the samples. These techniques have been applied as the tools of the inferential analysis:
- **Hypothesis Analysis:** These are used to ascertain the relationship of various theoretical assumptions developed during this research. Chi Square, also called as goodness of fit test. It is used to test how observed frequencies are different from expected frequencies.
- **5.5** Information of respondents: The researcher has used non-probability sampling technique as samples were selected based on the availability of the respondents and the convenience of the researcher. The researcher has adopted for this method because the prospect respondent can be anyone from the sampling frame i.e., the researcher chooses the sample based on who they think would be appropriate for the study. Samples are recognized bases on the ease and convenience of the sample element, the data constitute from potential dieticians / nutritionist who are currently practising the profession.
- **5.6 Limitations:** Due to time limitation the sample size was restricted to only 71 potential Dieticians / Nutritionists. Due to limitations of the research, all the Dieticians / Nutritionists across India were not reached. The study is done with time and resource constraints. The data collected pertains to the sample behaviour as on 2021 year, which may not be consistent with time in future. Some respondents might not be willing to disclose on certain related details, might be bias.

6. DATA ANALYSIS

6.1 Awareness Level of Protein Bars among Dieticians / Nutritionists: Awareness among Dieticians / Nutritionists is very crucial for the protein bar industry to grow, because they are the experts where they will recommend the best health-oriented or protein rich product to their clients. Moreover, if these protein bars are validated by dieticians / Nutritionists, the consumers tend to follow what these experts recommend. The following table shows the classification of respondents based on the occupation.

Table 1: Awareness Level of Protein Bars among Dieticians / Nutritionists

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	60	84.5	84.5	84.5
No	11	15.5	15.5	100.0
Total	71	100.0	100.0	

Source: Primary Data

It is exhibited from the above table that majority of the Dieticians / Nutritionists are aware of the Protein Bars that are being available in the Indian market. The reason why most of the Dieticians / Nutritionists are aware of protein bars looks to be from two ways, the brands are promoting these protein bars among dieticians & nutritionist and there are set of consumers who are seeking to opt for weight management or are busy with their hectic lifestyle or insufficient time to cook food require protein bars as a need more than it just being a luxury.

6.2 Consumption of Protein Bars by Dieticians / Nutritionists themselves: Is it just that dieticians / nutritionists are aware of this category of Protein Bars or they themselves consume these protein bars? The information about consumption of Protein Bars by Dieticians / Nutritionists themselves is depicted in the table as follows:

Table 2: Consumption of Protein Bars by Dieticians / Nutritionists themselves

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	30	42.3	42.3	42.3
No	38	53.5	53.5	95.8
Don't' Remember	3	4.2	4.2	100.0
Total	71	100.0	100.0	

Source: Primary Data

It is exhibited from the above table that the majority of the Dieticians / Nutritionists do not consume protein bars by themselves. There might be multiple reasons to this – may be the price point, daily consumption of packaged food being an issue, trust on the brand, awareness level of that particular protein bar brand, ingredients in that product, preservatives and many more factors. Overall, there seems not much of significant difference in the consuming or not consuming the protein bars among Dieticians / Nutritionists.

6.3 Taste Acceptability of Protein Bars among Dieticians / Nutritionists: Health and taste both needs to be balanced in a protein bar —does the protein bars currently available in the market acceptable on its taste parameters? The information about consumption of Protein Bars by Dieticians / Nutritionists themselves is depicted in the table as follows:

Table 3: Taste Acceptability of Protein Bars among Dieticians / Nutritionists

	Frequency	Percent	Valid Percent	Cumulative Percent
Excellent	12	16.9	16.9	16.9
Good	58	81.7	81.7	98.6
Bad	1	1.4	1.4	100.0
Total	71	100.0	100.0	

Source: Primary Data

It is exhibited from the above table that the majority of the Dieticians / Nutritionists are finding the protein bars to be good and not excellent. Thus, there seems to be scope for improvement in the overall taste factors. There seems to be scope of improvement in multiple factors like mouth feel, taste, texture, quality, ingredients in a protein bar.

6.4 Protein Bar being convenient to carry food for Dietician / Nutritionist clients: It is very difficult to manage the nutritious protein rich food on the go, with the increasing hectic lifestyle and no time to cook food, it is very important for a nutritious, protein rich food like protein bar to be a perfect fit for on-the-go snacking. The information about the Protein Bar being convenient to carry food for Dietician / Nutritionist clients is depicted in the table as follows:

Table 4: Protein Bar being convenient to carry food for Dietician / Nutritionist clients

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	69	97.2	97.2	97.2
No	2	2.8	2.8	100.0
Total	71	100.0	100.0	

Source: Primary Data

It is exhibited from the above table that majority of the dieticians / nutritionist are accepting the fact that protein bars are convenient to carry as a on-the-go nutritious protein rich snack for their clients. The clients who are reaching out to dieticians and nutritionist are due to poor health or looking for diet plan that fits in their hectic life or opting for weight management, today they are leading a somewhat unhealthy hectic lifestyle with no time to cook, thus protein bar perfectly fits into their hectic lifestyle providing the right nutrition and protein for daily consumption.

6.5 Recommend Protein Bar to Dietician / Nutritionist clients: If Dietician / Nutritionist believes that protein bar are best use case for consumption for their clients who are leading a hectic lifestyle or don't have time to cook or are seeking a nutritious protein rich mini meal on the go, these dieticians, nutritionist will check for the perfect brand of protein bar which are high on protein, fibre, best of ingredients, no preservatives, no artificial sweetener and so on. Once they validate these, they will recommend protein bars to their clients for their specific needs. The information about the recommendation of Protein Bar to Dietician / Nutritionist clients is depicted in the table as follows:

Table 5: Recommend Protein Bar to Dietician / Nutritionist clients

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	69	97.2	97.2	97.2
No	2	2.8	2.8	100.0
Total	71	100.0	100.0	

Source: Primary Data

It is exhibited from the above table that majority of Dietician / Nutritionist have validated the protein bar being the best use case consumption for their clients who are leading a hectic lifestyle or don't have time to cook or are seeking a nutritious protein rich mini meal on the go. Majority of Dietician / Nutritionist recommends protein bar to their clients.

6.6 Best time to eat protein bars as per Dietician / Nutritionist: Protein bars can be consumed at multiple occasions in a day, it can be used for hurried mornings, lunch, mini lunch, 5 pm hunger, evening breakfast, dinner or even at desert time because of the protein rich ingredients it keeps your stomach full for multiple hours. The information about the best time to eat protein bars as per Dietician / Nutritionist is depicted in the table as follows:

Table 6: Best time to eat protein bars as per Dietician / Nutritionist

	Frequency	Percent	Valid Percent	Cumulative Percent
Breakfast	7	9.9	9.9	9.9
Lunch	9	12.7	12.7	22.5
Mid-Evening	53	74.6	74.6	97.2
Dinner	2	2.8	2.8	100.0
Total	71	100.0	100.0	

Source: Primary Data

It is exhibited from the above table that majority of Dietician / Nutritionist found that their clients prefer to have protein bars for Mid-evening. It looks like people plan for their morning breakfast, they carry tiffin for

lunch, they go home for dinner but the mid-evening i.e., 5 pm hunger is not planned, they consume mostly what is available at their offices or colleges or the place of work. So, protein bar perfectly fits the Mid-Evening snack – a 5 pm hunger snack.

6.7 Hypothesis Testing: To understand how receptive the dietician and nutritionist are towards Protein bars awareness level and recommending it to their clients.

H0: There is no association between Awareness of Protein Bars and recommendation of Protein Bars for dietician / nutritionists' clients.

H1: There is an association between Awareness of Protein Bars and recommendation of Protein Bars for dietician / nutritionists' clients.

Table 7: Observed values to understand the association between Awareness of Protein Bars and recommendation of Protein Bars for dietician / nutritionists' clients.

			Recommer	ndation of	Total
			Protein Bars		
			Yes	No	
Awareness of	Yes	Count	59	1	60
Protein Bars		Expected Count	58.3	1.7	60.0
	No	Count	10	1	11
		Expected Count	10.7	.3	11.0
Total		Count	69	2	71
		Expected Count	69.0	2.0	71.0

Source: Primary Data

Table 8: Chi Square Analysis to understand the association Marketing Communication and trust towards protein packaged health food.

Chi-Square Tests								
	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)			
Pearson Chi-Square	1.872 ^a	1	.171					
Continuity Correction ^b	.142	1	.706					
Likelihood Ratio	1.347	1	.246					
Fisher's Exact Test				.288	.288			
N of Valid Cases	71							
a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .31.								
b. Computed only for a 2x2 table								

Source: Primary Data

It can be observed from above table that the Sig (0.171) is more than the expected value (0.05). Therefore, we accept the null hypothesis (HO). It indicates that there is no association between Awareness of Protein Bars and recommendation of Protein Bars for dietician / nutritionists' clients. It defines that dietician / nutritionists' getting aware of the Protein bar category does not simply mean that they will recommend the protein bars to their clients.

7. FINDINGS

Dietician / Nutritionist are the experts who guides the common person on getting healthy and provides the best of nutrition, diet plan for them. With the current scenario where in their clients who are majorly professionals are busy in their office work, leading a hectic lifestyle and moreover no time to cook food, thus

comes the role of Dietician / Nutritionist to provide them the convenient nutritious food that fits perfectly in their hectic lifestyle and Protein Bars seems to be the best option for these busy individuals.

The reason why most of the Dieticians / Nutritionists are aware of protein bars looks to be from two ways, the brands are promoting these protein bars among dieticians & nutritionist and there are also set of consumers who are seeking to opt for weight management or are busy with their hectic lifestyle or insufficient time to cook food require protein bars as a need more than it just being a luxury. But at the same time it is observed that the majority of the Dieticians / Nutritionists do not consume protein bars by themselves. There might be multiple reasons to this — may be the price point, daily consumption of packaged food being an issue, trust on the brand, awareness level of that particular protein bar brand, ingredients in that product, preservatives and many more factors. Overall, there seems not much of significant difference in the consuming or not consuming the protein bars among Dieticians / Nutritionists.

Due to convenience of the protein bars and how it perfectly fits as in the Mid-Evening snacks – a 5 pm hunger trigger point where in the customers don't plan their food like they do for morning breakfast, lunch and dinner and ever growing demand from their clients, majority of the Dieticians / Nutritionists have validated the protein bar being the best use case consumption for their clients who are leading a hectic lifestyle or don't have time to cook or are seeking a nutritious protein rich mini meal on the go. Majority of Dietician / Nutritionist recommends protein bar to their clients. And lastly majority of the Dieticians / Nutritionists are finding the protein bars to be good and not excellent. Thus, there seems to be scope for improvement in the overall taste factors. There seems to be scope of improvement in multiple factors like mouth feel, taste, texture, quality, ingredients in a protein bar.

8. CONCLUSION

Market dynamics have changed now due to pandemic, it has become a new normal life for people. People who were earlier foodie or junk foodie or selectively healthy are now health conscious, they are taking up preventive measures to keep up their health. And in this preventive health measures, dietician and nutritionist play a major role to improve their lifestyle. People have started consuming health food and one of the major revolutions that has come into health food are the protein bars, as compared to earlier now there is a separate aisle in the supermarket for protein bars, the category is growing with more and more people demanding the protein bars for daily consumption. Dieticians and Nutritionist are now accepting, validating, and recommending the usage of such protein bars for their clients. They understand that their clients are having varied needs, they are professional and have a very hectic lifestyle or unable to cook or unable to set their diet plans or want to lose weight or needs something healthy as a meal replacement or they want on-the-go snacks or need something healthy to munch on, for all these needs there is a convenient healthy and tasty alternative which are protein bars. Dieticians and Nutritionist play a vital role in shaping the protein bar industry, because of the dynamic nature of protein market and the ever-changing consumer behaviour, dieticians and nutritionist should learn, adopt, develop and be a part of this growing protein bar market that will bring in more transparency and acceptancy among the consumers to shape the protein bar market of the future. The present study reveals the same.

9. SUGGESTIONS

- 1. It is suggested to Dietician & Nutritionist to help formulate protein bars in alignment with the brands so as there is synergy between what is being supplied and the demand from the clients. Protein Bars can be launched to serve specific needs of the clients.
- 2. It is suggested to Protein Bar brands to enhance the taste, have nutritional transparency, cut down on preservatives, added sugar, saturated fat so that dieticians & nutritionists find it more beneficial for their client's needs. Protein Bar can also work as Meal Replacement Bar and On-the-go Snack.
- 3. It is suggested to Protein Bar brands to reach out to Dieticians, Doctors, since consumers are more influenced to consume protein bars recommended by them.

4. It is suggested to Protein Bar brands to reduce the cost of the Protein Bar. A protein bar worth Rs 100/bar, clients would not spend to buy them on regular basis. The Protein Bar that will fit into consumer's daily life need to be cost effective and widely available. Moreover, to make it a habit for consumers, it should be reasonable.

10. REFERENCES

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INFO

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