

A Study of Awareness of Dietary Food Apps and its Popularity in Pune City

Rina Dongre*, Rasika Gumaste**, Gauri Shah***, Shubham Bapat****

Abstract

People are becoming aware about the right diet and physical exercise in their daily routine. It was found out that there are more than 100,000 apps available related to fitness/nutrition/diet on various smartphone platforms and majority of these apps are free. The increased use of smart phones, thus had given access to easily available information regarding the diet and exercise. These apps are able to give easy, and free access to information and is a tool for influencing and intervening in the dietary choices of consumers. Though right now, the apps are used mostly by young adults, it can be used by people of all age. Further, it may pave a way for new enterprise where the chefs can have a tie up with the app companies to provide food as per the diet plan.

Keywords: Dietary Apps, Awareness about Dietary Apps, Smart Phones, Personalised Diet Plan

striving to be fit. It was found out that there are more than 100,000 apps available related to fitness/nutrition/diet on various smartphone platforms and majority of these apps are free and more than 50 million downloads of these apps.

In India, approximately 35% of adults and 17% of youths are obese. In last few decades, there is a tremendous increase in obesity, cardiovascular diseases, several form of cancers, diabetes, and hypertension globally. The major reasons cited can be sedentary lifestyle and increased consumption of processed food among many other. This is the major reason to develop interest in weight control and exercise. As it is said, to be fit, food has 70% contribution and 30% contribution can be attributed to physical exercise. In majority of the smart phone apps, both these features are combined. Food tracking and weight control techniques are provided through various means - be it messaging or videos.

The smartphone apps are low in cost and are easily accessible. Traditional methods of weight loss are resource intensive and at times quite expensive, making it difficult for many to use. These lacunas are overcome by smart phone apps which are equally effective as the in-person intervention. Smart Phones help to give useful information at quite low price and is available at a click of a button. Due to smart phone apps, even the specialised diets/fitness programs for specific requirement - like post cancer, lactating mothers can be catered for the focused group. Hence, what better than use these smartphones as a platform to deliver the health care assistance and information. Calorie counters or diet trackers are the most popular type of nutrition app. Their main objective is to measure calories consumed and burned by the user in a day. These apps work in a pretty simple way: first, a user sets a goal, in most cases their weight. After that, they

OBJECTIVES

- To study awareness of dietary food apps amongst people of Pune.
- To find out popularity of these apps.

INTRODUCTION

In today's era of 4.0, everything is becoming automated. The advent of smart phones has made it easy to use the technology for various means. The increased awareness regarding the nutrition and fitness has increased the demand for intervention of technology giving the assistance for the same. Wellness and healthy lifestyles have become mainstream. Resultantly, interest in fitness applications has grown as fast as the number of people

* Assistant Professor, AISSMS CHMCT, Pune, Maharashtra, India. Email: rinadongre@hotmail.com

** Associate Professor, AISSMS CHMCT, Pune, Maharashtra, India. Email: gumasterasika@gmail.com

*** Associate Professor, AISSMS CHMCT, Pune, Maharashtra, India. Email: gauristars@gmail.com

**** Student, AISSMS CHMCT, Pune, Maharashtra, India.

input information about their activities and the food they eat, and the app calculates the calories they've consumed and burnt. According to goals and calorie data, these applications can analyse users' progress and send them notifications with dietary recommendations or reminders.

Applications related to meal planning help users track calories even before they eat. Users can choose their weight goals, diet, and food preferences. On the basis of this information, an app generates a detailed diet program for a day, week, or month. Users can choose recipes from the app's recipe book or add their own. The best examples of such applications are 'Diet Assistant' and 'Eat This Much'. These apps are of great assistance to check the dietary needs and plan meal as per the diet.

Thus, variety of apps are available giving assistance regarding the weight control and balanced diet consumption. They might help in either some or all of the following points - providing feedback, tracking the water/liquid intake, setting goal for healthy eating, tracking the nutrient and calorie intake, track the physical activity/calorie consumption etc

REVIEW OF LITERATURE

- Schumer et al. (2018) in their study have studied various apps falling under the category of health, nutrition and fitness. The 86 apps they studied were all free of cost. They found out that diet apps were more popular as compared to nutrition apps. 94 % of the apps they studied were targeting customers of all age.
- In this study, analysis of the main features of the most popular nutrition apps was done and were compared for their strategies and technologies regarding dietary assessment and user feedback by Franco et al. (2016). They concluded that there is a great demand for mobile apps recommending and monitoring the diets. Some of the apps in study had the feature of connecting with health professionals and nutrition balance score. However, none of the app could give personalized diet advice.
- Doub et al. (2015) have highlighted that Mobile devices and apps are increasingly been used by young adults and parents while deciding the nutritional requirements of the family. These apps are having an impact on the decisions taken by them and hence the marketing professionals can study and develop new mobile applications for promoting health sector.
- Ferrara et al. (2019) suggested that diet tracking apps are the most popular. They reviewed the usability of diet-tracking apps and the degree to which these app features align with behaviour change constructs. They further assessed the variations between apps in nutrient coding. They concluded that almost all reviewed diet-tracking apps were good in terms of usability. Majority of these apps used various behaviour change constructs, and could precisely code the calories and carbohydrates. They further remarked that dietary apps play a important role in dietary intervention studies.
- Evan and Clarke (2019) found out that location and presentation of screen controls greatly influences whether customers use the features offered by an app. Even the low-income family groups can take advantage of the dietary apps and use it appropriately to improve the well-being.
- Gilliland et al. (2015) developed an app which was designed "to encourage healthy eating by reducing educational, behavioural, and economic barriers to accessing healthy, local food". The study conclude that the app has direct impact on the healthy food consumption by the users.
- Schoeppe et al. (2016) in their study gave ample evidence that app-based interventions are very effective for improving diet, encouraging physical activity and note the sedentary behaviours. They further suggested that multi-component interventions appear to be more effective than stand-alone app interventions though it can be researched further to prove absolutely.
- Maringer et al. (2018) in this study, expressed a relation between the data given by the users to the dietary apps and the privacy policies. It was concluded that the food consumption data obtained from various dietary apps is interlinked with various types of contextual data related to behavioural motivation, physical activity, health, and fitness. Majority of apps studied lacked technical documentation regarding data export. There is no documentation regarding the implemented terms of use and privacy policies. The vendors can exploit this data in the absence of such documentation.
- Fallaize, Franco, Hwang and Lovegrove (2019) developed a web app to deliver automated personalised food-based nutrition advice. They believe

that nutrition apps have great potential for people to keep track of what they are consuming and thus improve their diet quality. During the study, they evaluated the personalised nutrition report provided by the app and compared it with the personalised food-based advice of nutrition professionals. The app proved to be quite suitable and at par in giving the personalised services.

- Braz and Lopes (2019) assessed 16 apps which were free for mobile devices in Brazil. They opined that the apps presented partially adequate or inadequate information about food composition. They felt that these apps are not useful for nutritional guidance as those are not based on reliable information source. However, the apps received positive ratings by users.

RESEARCH METHODOLOGY

Primary Data Collection: The primary data was collected using the structured questionnaire. 100 responses which were complete in all aspects were considered for analysis. Convenience Sampling method was used while collecting the data. Questions were divided into 3 sections. 1st section included questions based on awareness about dietary food apps, 2nd section focused on popularity and problems that can affect the concept of dietary food delivery apps. Finally, 3rd section comprised questions based on the idea of sustainability and practicality of the concept in Indian mindset.

Secondary Data Collection: It was collected from articles, journals, research papers, newspapers, magazines, etc.

DATA ANALYSIS AND INTERPRETATION

Awareness and Popularity of Dietary Food Apps

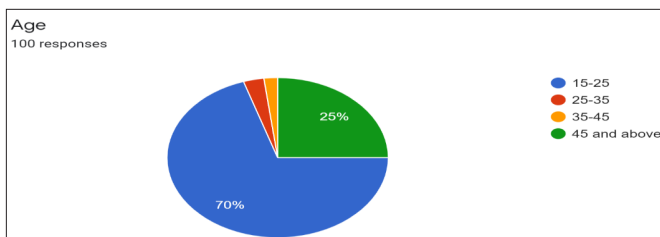


Fig. 1

Majority of the respondents were of the age group 15-25 followed by respondents above 45 years of age. This is also due to convenience sampling method adopted.

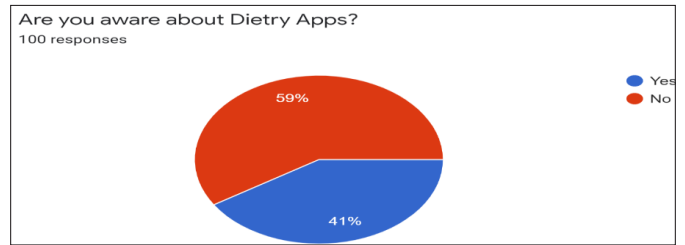


Fig. 2

Irrespective of the age, majority of the respondents are unaware about the dietary apps. As is visible, majority i.e., 59 % of the respondents are unaware of such apps.

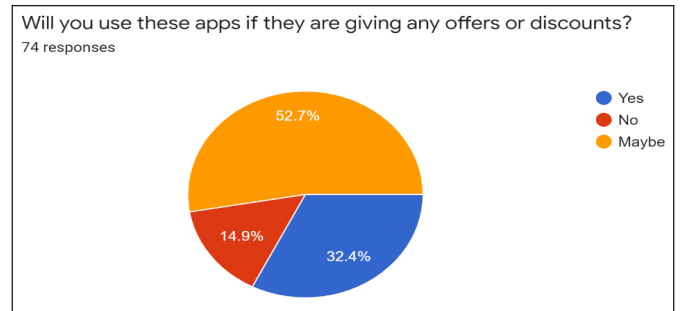


Fig. 3

Most of the people may use these apps if they are offering any offers or discounts. Price this seems to be major deterrent while using these apps.

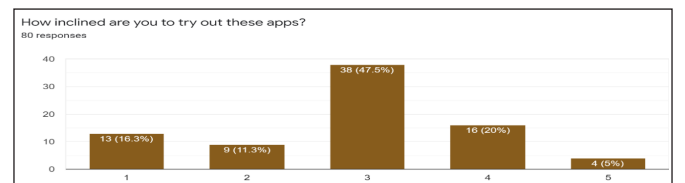


Fig. 4

The respondents if made aware and given the knowledge, would like to use these apps. 47.5% of the respondents are inclined to use the app.

48% of the respondents do not know the apps which deliver this kind of food. The awareness can be increased through proper media.

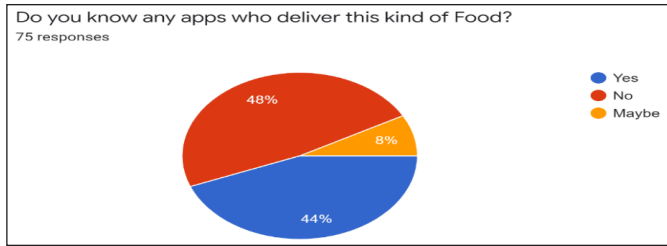


Fig. 5

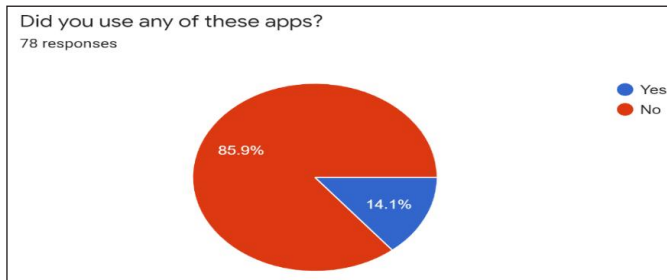


Fig. 6

The majority of the respondents have never used the dietary apps. It can be safely said that the use of these apps is still in nascent stage.

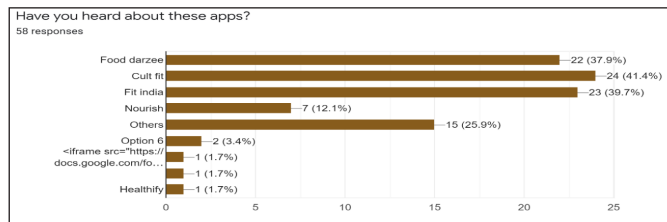


Fig. 7

The most popular apps are food darzee, cult fit and fit India known to the people of the city.

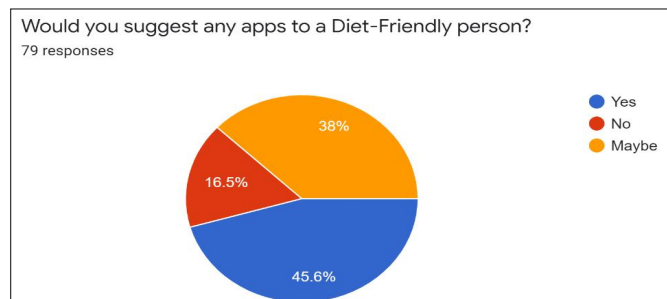


Fig. 8

Most people will suggest these apps to any diet friendly person, hence there is a scope to increase the popularity of these apps.

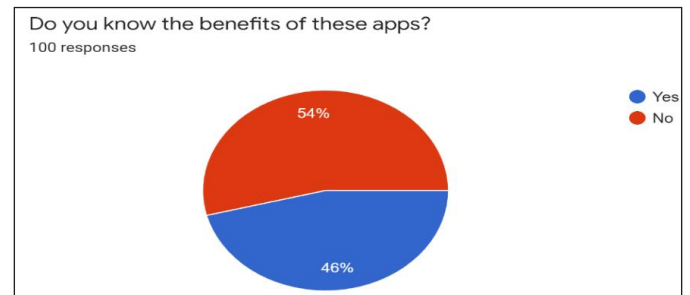


Fig. 9

Majority of the people are not aware of the benefits of the dietary food apps.

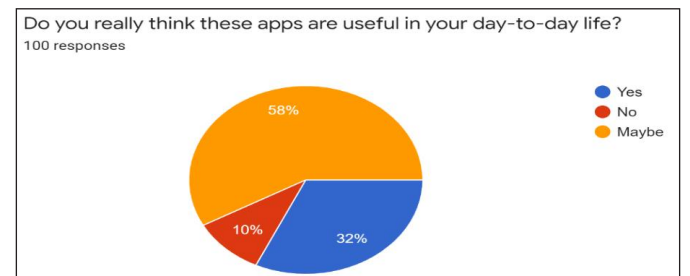


Fig. 10

Most people think that maybe these apps are helpful in day to day life.

FINDINGS AND OBSERVATION

Based on the responses following are the findings:

59% of the respondents are unaware of the apps which provides dietary food as per the need and requirements. To those who are aware, price seems to be major deterrent. Those who are not using, the inclination towards using is 47.5% provided the awareness is spread about those apps. 86% of the respondents never used such delivery apps. Amongst the options which were provided, 'Food Darzee', 'Cult fit' and 'Fit India' are the popular and known apps. As the research indicates, respondents are not sufficiently aware about the benefits of using such apps however 58% are optimistic about the fact that such apps might be beneficial in maintaining the health and fitness.

CONCLUSIONS

As is proved during the research, people specially in Pune, India are not aware about the apps providing the food as per the health requirements. Through proper marketing, awareness and demand can be increased about such apps.

The smart phone users are increasing day by day. At the same time, the sedentary life style is giving rise to life style diseases and increased obesity. Both the reasons together is a good impetus for the growth of dietary/fitness/nutrition mobile apps. These apps, as the various researches proves, have the potential of influencing and intervening the dietary choices among the consumers. It may prove beneficial in improving the physical well being of the citizens. As majority of these apps are free, even the low income group people can access the information regarding the balanced diet. Apps can be developed which can give personalised diet advice which is considered as one of the major setback among the apps. Use of Artificial Intelligence can also be introduced in the apps. At the same time, reliability and authenticity of the data provided on the apps should be taken care of. This will prove beneficial in long run to increase the trust and faith about these apps.

It may further pave a way of innovation in culinary industry for chefs and a wonderful new enjoyment for the customers. The customers may like to get the diet food delivered at their doorstep.

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