



# COVID-19 LOCKDOWN'S IMPACT ON DIETARY HABITS, PSYCHOLOGICAL STATUS AND PURCHASING PATTERN OF INDIVIDUALS IN INDIA

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## ABSTRACT:

**Background:** Coronavirus disease 2019 (COVID-19) has impacted people's lifestyles all around the world. As a result of the unanticipated total lockdown, the public's dietary habits, psychological status, and purchasing patterns altered. Healthy eating habits and physical activity are well-known to improve one's health and well-being, particularly when the immune system is weakened. **Aim:** The aim is to assess the impact of COVID-19 Lockdown on dietary habits, psychological status and purchasing pattern. **Objective:** To investigate the immediate impact of the COVID-19 pandemic on dietary habits and lifestyle changes among the Indian population and to study the diet patterns, food purchasing patterns and the psychological status during the lockdown. **Materials and Method:** This research was conducted through an online survey where the responses of participants were documented using a self-prepared questionnaire. The questions were based on the changes in their dietary pattern, psychological status and purchasing pattern. Randomised Sampling Technique was used for the collection of data. **Result:** Importance of one's health came into light during the pandemic, and it has had a significant impact which made people consume foods that helped to boost their immunity and increased the consumption of home cooked foods, fruits, and vegetables rather than consuming foods from the restaurants. Consumers and their buying habits have been altered dramatically as a result of the various restrictions. People chose to buy products from Kirana stores and online delivery platforms rather than going to supermarkets which were generally a hotspot of Covid-19. **Conclusion:** Due to the pandemic and its widespread consequences, people became sensitive to the emotional impact of Covid-19 infection. Despite the fact that most nations have placed restrictions on social activities, people sought out to different activities like yoga, meditation, gym and other hobbies to keep themselves occupied while most of them chose to accept the situation.

**IndexTerms - Covid-19 Lockdown, Pandemic, Diet, Purchasing, Mental Health, Psychology.**

## 1.0 INTRODUCTION

The outbreak of coronavirus was declared as a global pandemic, in March 2020, by the World Health Organization [WHO] (1). Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus (2). The outbreak of this pandemic led to a complete lockdown in various parts of the world.

The Prime Minister of India issued a 14-hour public curfew on March 22, 2020, and a sudden total lockdown on March 24, 2020 (3). The dietary habits of people around the world have been altered as a result of the lockdown.

During the pandemic, there has been an increase in people's awareness to look after their health and maintain a proper diet, which has been attained through the consumption of immunity boosters, healthy and nutritious concoctions. People have also seen a rise in the amount of fruits and vegetables they consume in their diet in order to support and improve their health (4).

During the lockdown, people were unable to move out of their houses due to government guidelines and because of this they were unable to stick to their usual purchasing pattern and had to stock up products while others were not lucky enough to purchase their usuals (5). People chose to have all of their supplies brought to their homes to minimize exposure to the virus, or they walked to small Kirana stores and bought what they needed (6). A lot of restaurants also had faced major losses due to the lower purchasing pattern during the lockdown.

The COVID-19 pandemic and the following economic downturn has had a severe impact on many people's mental health and created additional barriers for those who already suffer from mental illness (7). Psychological status is an important factor for the body to function rightly, but it was affected for most of the population during the pandemic due to certain factors like loss of income, loss of loved ones, loneliness, and closures of business. It was also found that individuals had an irregular sleeping pattern as a result of the pandemic, which had an impact on their physical and mental health (8). The psychological impact of quarantine, as well as the most significant psychological reactions (such as anxiety, insomnia, depression etc) in the general population in relation to the COVID-19 pandemic was also observed (9). This study has shed light on the various and varied changes that the pandemic has brought about in the way we eat, how our mental health has been, and how we purchase (10).

## 2.0 MATERIALS AND METHODOLOGY

The focus of this research was to understand Covid-19's lockdown impact on dietary habits, psychological status and purchasing patterns of the population. This is a prospective observational study and Randomised Sampling Technique were used to collect data. The given sample size was 60-70 but the responses received was 100.

This research was conducted through an online survey questionnaire (Google Forms) which had 19 questions and was circulated among the known population through social media platforms. The questionnaire was split up into three categories- dietary habits, psychological status and purchasing pattern. The primary focus was on questions like how the people's eating pattern and dietary habits has changed, how their mental health was affected during the lockdown and how they tried to keep themselves occupied, and also their purchasing pattern of food and other necessities was observed.

The inclusion criteria were between the age groups of 5-17 years, 18-60 years, and above 60 years. The exclusion criteria were people suffering from chronic/severe illness, pregnant and lactating women. The survey was conducted among various age groups, but the majority of the responses received were between the age groups 18-60.

## 3.0 RESULTS AND DISCUSSION

A total of 100 participants from 2 different age groups participated in this online questionnaire and submitted their responses. Majority of them were between the age groups of 18-60 years. Out of 100 responses, 37% belonged to the category of students, 35% belonged to the category of employees and the remaining 28% fell in the category of others.

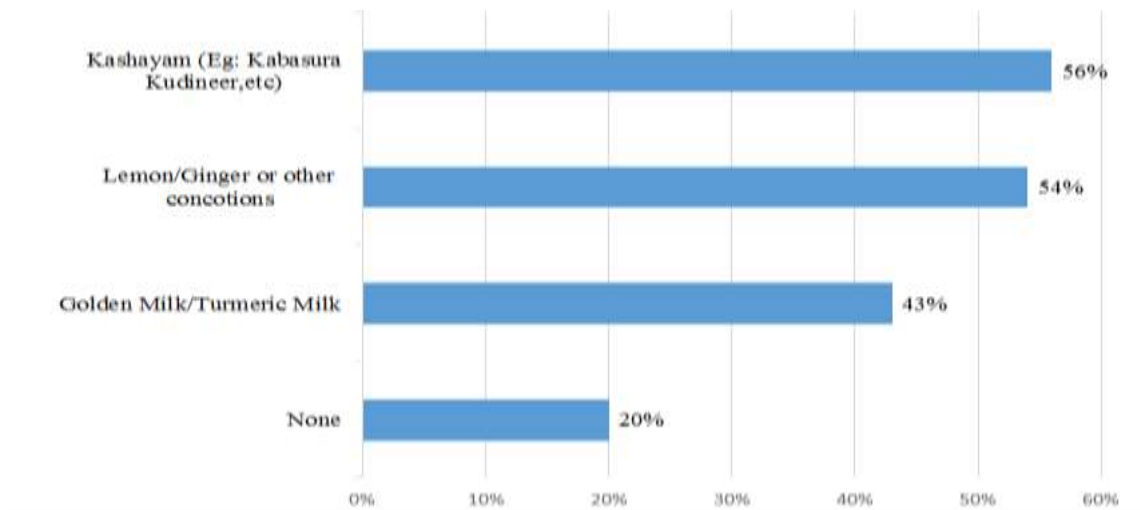
### 3.1 Dietary Habits:

As a result of the lockdown, 32% of the participants have consumed foods more than their usual quantity, whilst 43% of the participants did not show any changes to their intake and 25% were unsure of their intake.

It was observed that 28% of the participants did not increase their intake of fruits and vegetables. 72% of the participants had increased their consumption.

During the pandemic, 45% of participants observed that they had gained weight, whereas 42% did not gain any weight. 13% were unsure if they gained, lost or remained in the same weight.

From the study, we can see that 63% of the participants have agreed on the decrease of food consumption from restaurants during the lockdown, 25% found no change in the frequency of food consumption from restaurants and 12% remained unsure about the same.

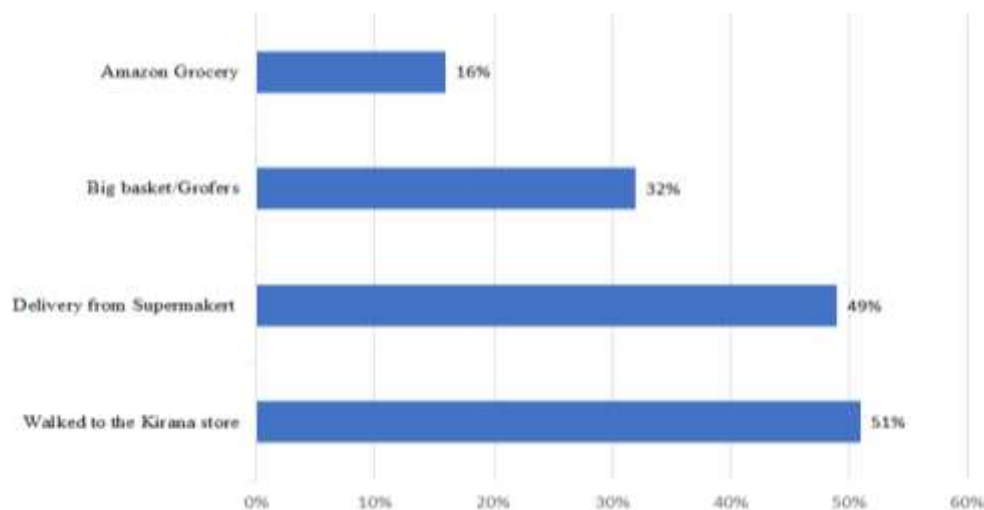


**Figure 1: Foods/Drinks consumed by the participants during lockdown (N=100)**

When looking into the food or drink consumption pattern it was observed that among the 100 participants, 56% have consumed Kashayam like Kabasura kudineer, Nilavembu Kashayam, etc, 54% have taken food items like Lemon/Ginger or other concoctions, 43% have consumed Golden Milk/Turmeric Milk and 20% did not consume any of the above.

### 3.2 Purchasing Pattern:

Among the 100 participants, it was observed that 43% purchased a lot of eateries during the lockdown, however, 27% did not purchase much of the eatery and 30% were not sure if their purchase was more or less.



**Figure 2: Mode of purchasing groceries during the pandemic (N=100)**

The majority, 51% of the participants' mode of choice for purchasing groceries during the lockdown was by walking to the nearest Kirana store since participants were less likely to shop inside the grocery store, followed by 49% of the participants who got their groceries delivered from supermarkets. 32% and 16% of the participants chose to purchase their groceries through online platforms such as Big basket/Grofers and Amazon Groceries (Figure 2).

While looking out for different ways in which participants kept themselves occupied during the lockdown it was observed that 71% of the participants did not purchase anything, though 29% purchased books, plants, craft materials, guitar, gym equipment, board and card games to keep themselves occupied during the lockdown.

While considering the items over purchased by participants during lockdown it was seen that 74% chose not to over purchase, but 26% of the participants had over purchased groceries/food items like snacks, milk, millets, rice, pulses, spices, and other provisions. Also 52% of the participants have observed a decrease in their expenditure on purchasing and whereas 48% felt an increase on the same.

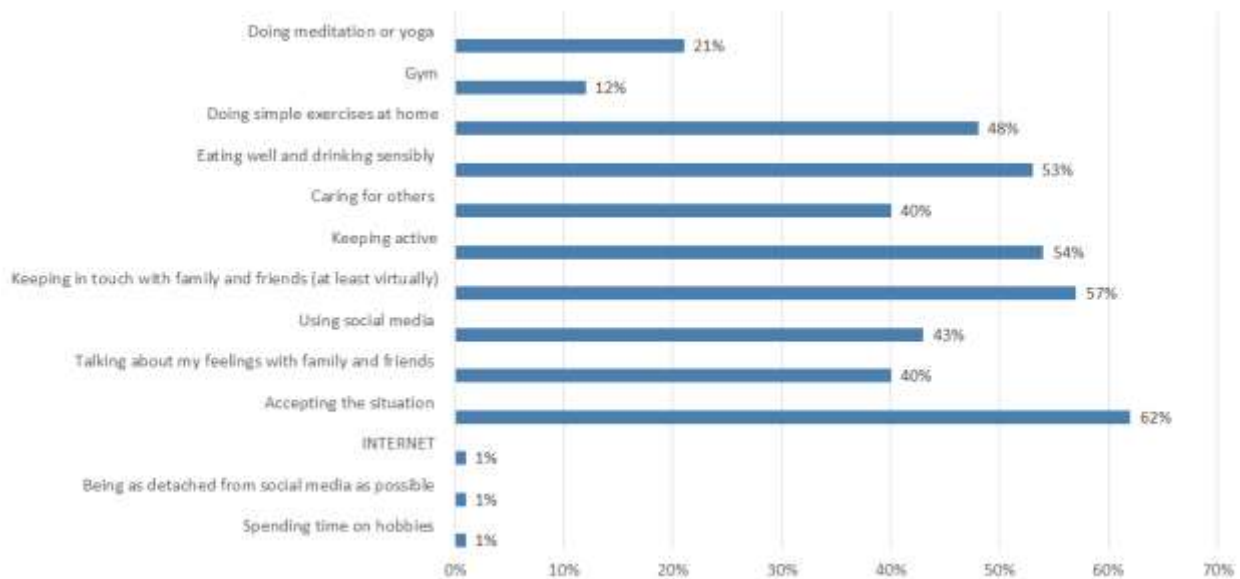
### 3.3 Psychological Changes:

The psychological health of most of the participants around 62% were not feeling nervous, anxious or on edge. However, 38% were feeling nervous, anxious or on edge.

Out of the 100 participants, 64% of them sometimes worried too much about the lockdown's effect on their health and safety, whereas 18% of them rarely worried and another 18% of them did not worry at all about the lockdown's effect.

42% of the participants felt tired or had little energy to do anything, on the other hand, 30% rarely felt tired and the remaining 28% of them did not feel tired or have little energy to do anything.

The regular sleep pattern of 51% of the participants were affected during the lockdown, whereas 37% of participants remained unaffected and 12% of the participants may or may not have had a regular sleep pattern during the lockdown.



**Figure 3: Mental and physical health status during the lockdown (N=100)**

From Figure 3, we can conclude that 62% of the participants have learnt to accept the situation, 57% kept in touch with their families and friends, 54% kept themselves active, 53% maintained proper eating and drinking habits, 48% did simple exercises at home to keep themselves fit during the lockdown, 43% used social media to keep themselves engaged, 40% of the participants talked about their feelings to their families and friends and also cared for others during the pandemic, 21% preferred to do meditation or yoga, 12% worked out in the gym, while 2% of the participants detached themselves from social media and spent time on their hobbies, the remaining 1% enjoyed surfing the internet.

#### 4.0 CONCLUSION

100 participants mainly between the ages of 18-60 participated in the survey and answered questions related to the changes in their diet, psychological status and purchasing pattern during the Covid 19 lockdown. People became more health conscious and wanted to boost their immunity by consuming foods/beverages like lemon or ginger concoctions, golden milk, kashayam, etc. The lockdown's effect was evident on people's appetite as well as their weight; some have lost their appetite while some tend to have gained weight. Adhering to the government's guidelines for the pandemic and keeping in mind the safety concerns, people preferred to consume foods prepared at home rather than purchasing from restaurants. There has also been an increase in the consumption of fruits and vegetables during the pandemic.

To avoid being in crowded places which was a hotspot during the pandemic, people chose to get their groceries and other food items delivered by supermarkets or/and online shopping services (Amazon Grocery, Big Basket/Grofers) at their doorstep. To keep themselves calm and composed, people purchased books to read, yoga mats to meditate, etc. To stay connected with their families they played board games, card games together and kept themselves distracted from the plight of the pandemic. Some even turned towards art for help during this pandemic and purchased guitar, paint, crafts and so on. Over a point of time due to the fear of another lockdown, people over purchased essentials and eateries such as milk, rice, pulses, and snacks.

Through this survey, we can conclude that the expenditure on purchasing everything except the essentials has decreased to some extent. Everyone's mental health was disrupted by the lockdown; therefore, people found their own ways to keep their mental and physical health steady by keeping in touch with family and friends, keeping themselves active by doing simple home exercises, gym, meditation, and yoga while most of them accepted the situation. Since the pandemic was an unexpected and alarming situation, it was natural for the people to worry about the lockdown's effect on their health and safety, and due to the mental exhaustion, most of them felt tired and had little energy to do anything which in turn affected their regular sleep pattern. On the contrary most of them did not feel nervous, anxious or on edge despite the global pandemic.

#### 5.0 LIMITATION:

To collect the required data, the outcomes of this study were entered into Google Forms and distributed through social media to a recognized circle. Different age groups were included in the inclusion criteria; however, we were only able to engage people between the ages of 18 and 60. Due to the use of online questionnaires, there is no direct one-on-one connection.

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