

# Impact of COVID-19 Lockdown on Dietary and Lifestyle Pattern among the Selected Samples in Kerala

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**Abstract:** This paper represents the overview on how far the lockdown has been affected the dietary and lifestyle pattern of Kerala people during the Covid-19 Scenario.

**Keywords:** Anxiety, Coronavirus, Dietary habits, Food storing, Isolation, Life style, Lockdown, over consumption, Physical Activity, Staying home.

## 1. Introduction

Coronavirus sickness (COVID-19) is associate communicable disease caused by a freshly discovered coronavirus. It's a sort of common virus that causes associate infection in nose, sinuses, or higher throat. In late 2019, a brand new coronavirus referred to as severe acute metabolic process syndrome coronavirus a pair of (SARS-CoV-2) or corona virus sickness (COVID-19) was emerged. It absolutely was an extremely contagious infectious agent sickness, that appeared 1st in Wuhan in China, and so speedily unfold among China and worldwide. This leads the World Health Organization (WHO) on 11 March 2020, to acknowledge COVID-19 as a worldwide pandemic. (Hadia Radwan.,et.al 2021).

Researchers in China found that the foremost common symptoms among those who were hospitalized with COVID-19 include Fever, Fatigue, dry cough, Loss of appetite, Body aches, Shortness of breath, mucous secretion or phlegm. Symptoms typically begin 2 to fourteen days once contact with the virus. different symptoms may include inflammatory disease, Headache Chills, typically with shaking, Loss of smell or taste Congestion or runny nose, Nausea or vomit, Diarrhea.

On 25th March 2020 Prime Minister of India announced countrywide lockdown with social distancing restriction over the majority of commercial activities and mass gathering including educational and public institutions and also many restrictions on daily living, including isolation, social distancing, and home confinement. Lockdown forced many people to stay at home (study and work from home). Such action exerted a sudden and drastic change in the lifestyle of the population. (Mahendra Kumar & Sachin Dwivedi., 2020).

Government of Kerala Imparted a statewide confinement on March 23 2020 as a first stage of Covid-19 Lockdown. The lockdown has been extended for several months from March to

august. The lockdown has been postulated to influence life style habits by increasing staying home, excessively storing food, disruption of one's routine and heightened anxiety hearing the evolving news of the virus and its spread. Such a scenario result in a modification in dietary habits, physical activity, and sleep patterns, additionally to psychological impact. In fact, this new scenario restricted access of people to daily shopping and have an effect on their selections for a healthy diet with resultant dependence on extremely processed, ready-to-eat cereals and junk foods, that are high in salt, sugar, and fats. Such dietary habits can increase the chance factors of chronic diseases like obesity, cardiopathy, stroke, kind two diabetes, some cancers, and chronic renal disorder. Moreover, restricted movement because of imprisonment might force many folks to remain home and to limit their physical activities and ends up in a lot of inactive behavior, that is related to an accumulated risk of chronic illness. Staying and working at home will have an effect on diet, food selection, and access to food and, thus, reduce potentialities and limit the practice of physical activity (PA). it had been found that quarantine negatively affected the PA of the Sicilian active population, particularly those of males, overweight individuals, and senior adults and therefore the aged. Similarly, a global study indicated a rise in daily sitting time from five to eight h per day throughout pandemic restrictions. It ought to be noted that before this pandemic, inadequate PA (low PA or inactivity and excessive screen time) and fat were delineated as a worldwide public pathological state. (Hadia Radwan.,et.al.2021).

In the time of COVID-19 pandemic, home fitness and also the use of recent technologies (videos and apps) are the solutions for being active. On the opposite hand, due to the isolation amount, avoiding inactive behaviors or physical inactivity is troublesome and, consequently, reduced PA and lower energy expenditure may negatively have an effect on Physical and psychological state. Moreover, the pandemic state of affairs is additionally related to emotions, like worry, sadness, and anxiety, that are indicated to cut back sleep quality. Considering the preventive role of adequate PA as a non-pharmacological aid for health during this period furthermore because the advantages of PA on psycho-physiological

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functions, the World Health Organization has developed pointers to adopt throughout home quarantine. Moreover, inactive behaviors, anxiety, and boredom caused by home confinement, may influence motivation to eat, change life style patterns, cut back diet quality, and promote over consumption, although calorie intake ought to be restricted with reduced PA throughout isolation. (Magdalena Górnick.,et.al.2020).

The continuous home confinement about four months has resulted a forceful change in life style and dietary changes among folks. those that were isolated within the home were additional interested towards preparation and consuming high energy food things. As a part of immunity boosting the population began to consume additional quantity of immune boosting food things. The communities were less active towards physical activeness thereby increasing the burden and BMI which ends up in obese and overweight population. People were less aware about the life-style diseases that causes as a results of unhealthy dietary habits. A study relating to life style and dietary changes throughout lockdown has shown that majority of the folks has gained weight throughout imprisonment that was resulted because of the unhealthy diet pattern and lack of physical activity.

At the same time a small amount of population was able to change their regular unhealthy lifestyle in a better and productive way. They take it as an opportunity to change their lifestyle. Strict diet and increased physical activity has been helped them to have a better healthy person. Citizens were encouraged to exercise in their homes (e.g., by doing yoga, dancing, and bodyweight training), and to exercise outdoors, limited to walking, running, cycling, alone, with members of the same household, or with one friend. There was no distance limit, but taking a car or motorcycle to go exercising was not allowed during the lockdown. Current study focuses on the change in lifestyle and dietary pattern among the Keralite population during the lockdown scenario. The study also emphasis on how far the citizens were able to maintain a healthy dietary habit. It aims to evaluate the dietary and lifestyle pattern of citizens during and before lockdown.

## 2. Objectives

- To study the dietary habits before and during lockdown
- Evaluate the lifestyle pattern before and during the covid-19 lockdown
- Determine the influence of Covid -19 lockdown in Dietary pattern and lifestyle

## 3. Results and Discussion

### 1) Age distribution of the selected sample (n=200)

Among the 200 selected sample 18percent belongs to the age group 15-20 years among them 2 percent were male and 16 percent were female, 70 percent belongs to the age group of 21-25 years, were female was 44 percent and male 26 percent, 8percent of the sample belongs to the age group of 26-30 years were 4 percent was male and 2percent female. There were no samples for the age group 31-35 years. 2percent of the

sample belongs to the age group 36-40 years of them 1percent was male and 1percent female. 1 percent of the sample belongs to the age group 41-45 years which was male and 2 percent of the male sample belongs to the age group 45-50.

### 2) BMI of the selected sample (n=200)

Among the selected 200 samples 60 percent were under Normal BMI of them 22 percent were Male and 38 percent were Female, 19 percent were Overweight among them 11 percent were male and 8 percent were female, 17 percent belongs to underweight category of them 2 percent were male and 15 percent were female, 3 percent of the sample were obese in which 1 percent was male and 2 percent Female.

### 3) Number of major meals of selected sample before and during covid-19 lockdown

Among the selected 200 samples 44 percent were having meals 2 times a day, 54 percent of the sample were having meals 3 times and 2 percent were having meals 4 times a day Before covid-19 lockdown. During Lockdown 25 percent had meals 2 times a day, 65 percent of the sample had meals 3 times a day and 10 percent had meals 4 times a day.

### 4) Proper time keeping of meals before and during covid 19 lockdown

Among the selected 200 samples 53 percent kept a proper timing on meals whereas 47 percent doesn't keep a proper timing on meals before Covid 19 lockdown. During the Covid-19 Lockdown 47 percent of samples were not able to keep proper timing on meals whereas 53 percent kept a proper timing on meals.

### 5) Food skipping behaviour before and during covid 19 lockdown

Among the 200 selected samples 34 percent skip meals, 37 percent didn't skip meals and 29 percent skip meals occasionally before the Lockdown. During the lockdown period 32 percent skipped Meals, 43 percent didn't skipped Meals and 25 percent skipped their meals occasionally.

### 6) Frequency of junk food intake

Among the 200 selected samples 82 percent prefer junk foods. Before covid-19 lockdown 66 percent consume junk foods 2-3 days/ week, 31 percent consumes junk food 4-5 days/week and 3 percent consumes junk foods in a daily basis. During covid-19 lockdown 79 percent of sample consumed junk foods 2-3 days/week, 20 percent consumed junk foods 4-5 days / weeks and 1 percent consumed junk food daily.

### 7) Change in dietary habit compared to normal

Among the 200 selected samples 52 percent experienced a change in their dietary pattern ,35 percent doesn't have found any changes and 14 percent of the sample was not clear about the changes on dietary habit.

### 8) Diet during lockdown

Among the selected 200 samples 21 percent feels that their diet was balanced, 26 percent says that their diet was somewhat balanced, 44 percent says that their diet was unbalanced and 10 percent feels like their diet during lockdown was unhealthy and unbalanced.

### 9) Change in physical activity during the lockdown period

Among the selected 200 samples 60 percent has been reduce the physical activity, 28 percent increased their physical activity

and 12 percent doesn't feel any change in their activity.

#### 10) *Sleeping hours*

Among the 200 selected samples 36 percent samples have sleep for less than 7 hours, 52 percent had sleep for 7-8 hours 10 percent had sleep for 9 hours and 4 percent had sleep more than 9 hours before Covid -19 lockdown. During Covid-19 lockdown 53 percent had sleep for less than 7 hours, 30 percent had sleep for 7-8 hours, 14 percent had sleep for 9 hours and 3 percent had sleep for greater than 9 hours

#### 11) *Leisure time activity time during lockdown*

Among the selected 200 samples 65 percent spend their time on using smart phones, 60 percent spent their leisure time watching movies, 43 percent spend time by simply sitting, 24 percent each spend for drawing and doing crafts, 37 percent spend time on cooking

#### 12) *Change in cooking time during lockdown*

Among the 200 selected samples 69 percent says that their cooking time has been increased during lockdown period whereas 31 percent doesn't have any change on their cooking time.

#### 13) *Change in sense of hunger and satiety during the lockdown period*

From the selected samples 76 percent of them feel more appetite, 18 percent didn't feel any change whereas 12 percent felt less appetite.

### 4. Conclusion

From this study it can be concluded that during the Covid 19 confinement most of the sample were leading a sedentary lifestyle. The dietary and lifestyle habits has been changed a lot. In this study majority of the sample were students who had online class instead of offline and the employees which include IT professionals, teachers were having work from home. Change in work pattern affected the dietary and lifestyle habits of samples I great extent. Sample who has been skipping their meals before lockdown has reduced during lockdown period and also their number of meals a day has been increased. But during lockdown most of them failed to keep proper time keeping on meals. Their food consumption of high calorie food items and junk food has been increased. Snacking in between meals have been drastically increased during lockdown period. The study shows that the cooking time has been increased during lockdown period were most of them prefer to cook high calorie, deep fries, unhealthy food items. The occasional usage of online food delivery platform has also been increased. Most of the samples felt like their eating habit get worsened at the same time a minority of samples spent their time on eating healthy and doing physical activity which includes walking, workout at home. A minority of sample make this lockdown a chance to enhance their health. Looking after lifestyle habits majority of samples spend time on watching movies, using phones, simply sitting and cooking. Sleep during night has been reduced whereas naps during day time has been increased. It shows that most of the samples were lead a sedentary unhealthy life style. Most of the samples gained weight during lockdown at the same time a minority of 20 percent loss their weight and became healthy.

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