

in turn was associated with lower subjective well-being and lower health related quality of life. Engaging in physical activity during confinement has been consistently associated with better outcomes on anxiety or mood disorders worldwide [3,4]. Changes in environmental exposures and increased screen time, such as TV, smartphone, and Internet usage, represent an expected consequence of confinement.

Moreover, reducing the use of screen based devices combined with outdoor exercise had more benefits for mental health than either healthy behaviour alone [5]. This new situation may limit access of individuals to daily shopping and affect their choices for a healthy balanced diet with subsequent dependence on highly processed, ready to eat cereals and junk foods, which are high in salt, sugar, and fats. Such dietary habits will increase the risk factors of chronic diseases like obesity, heart disease, stroke, type 2 diabetes, some cancers, and chronic kidney disease. Moreover, restricted movement due to lockdown may force many people to stay home and to limit their physical activities and results in more sedentary behaviour, which is associated with an increased risk of chronic disease [6].

Noteworthy is the fact that gyms and recreational areas were also included in the lockdown closures and hence were not available for individuals to exercise and carry out leisure physical activity. Furthermore, it has been reported that the lockdown measures could be associated with distressing experience and boredom because the situation is taking the world into uncharted waters. Such circumstances could be triggered by a loss of usual routine and reduced social and physical contact with others [6]. Studies have shown that sleep is crucial for emotional and mental wellbeing and helps to confront stress and anxiety. However, sleep patterns of individuals during the COVID-19 pandemic could be affected.

context, and considers the ability to fully participate in the activities

education students pursuing undergraduate degree were selected as subjects for the study. The age group of the subject ranged from 17 to 25 years.

For the purpose of the present study the following variable was selected Changes in lifestyle related behaviour due to COVID-19.

The following was the criterion measures selected for the purpose of the study: The changes in the lifestyle related behaviours due to COVID-19 were assessed by administering the changes in the lifestyle behaviour during COVID-19 [37].

The data was collected from the selected subjects after the administration of a questionnaire assessing "lifestyle behaviour" during COVID-19. The Lifestyle related behaviour changes questionnaire contains 20 statements and the response scale is anchored "significantly increased, slightly increased, grossly similar, slightly decreased, significantly decreased" [38].

Scoring instructions for the Lifestyle Related Behaviour Changes:

Items 1, 2, 6, 7, 8, 9*, 10, 17 and 20 are scored as:

2=Significantly decreased

1=Slightly decreased

0=Grossly similar

0=Slightly increased

0=Significantly increased

Items 4, 5, 11, 12, 13, 14, 15, 16 and 19 are scored as:

2=significantly increased

1=slightly increased

0=grossly similar

0=slightly decreased

2=significantly decreased

Item 3**, 18*** is scored as:

0=grossly similar

0=slightly increased/decreased

0=significantly increased/decreased

(*Item 9 is scored assuming that these recipes are usually high in calories.

**Item 3 is scored assuming that the person was having normal portion of meals and snacks before COVID-19 pandemic. **Item 18 is scored assuming that the individual was having an adequate 6-8 hours' sleep before pandemic).

A total of two hundred (N=200) male students pursuing Undergraduate degree in Physical Education (BSc (PE, HE and S)) from Indira Gandhi Institute of Physical Education and Sports Sciences, University of Delhi, participated in the survey. Their age ranged between 17 and 25 years.

The data was collected and analyzed by using SPSS version 16.0. This research was based on the assessment of lifestyle related changes during

COVID-19 and the subsequent data analysis and results of the study have been presented in this chapter. The lifestyle related behaviour change questionnaire, that was administered on the selected subjects were analysed statistically and the 20 questions responded by the subjects are presented below [35-42].

1. During COVID-19 pandemic, how has your probability of skipping one of the main meals (breakfast/lunch/dinner) changed? (Figure 1).

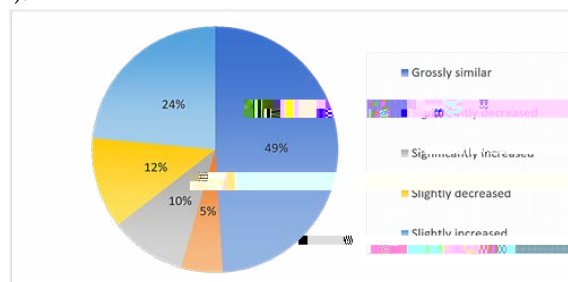


Figure 1. Responses of subjects on changes in probability of skipping main meal during COVID-19 pandemic.

From the above pie chart pertaining to the probability of skipping one of the main meals (breakfast/lunch/dinner) most/least/13840bthe mw [35-42].

From the above pie chart pertaining to the changes in the quantity/ portions of meals and snacks among the selected subjects, it is evident that 38% of the subjects revealed gross similar changes; 30% revealed a slight increase; 15% revealed a significant increase; 14% revealed slight decrease; 3% revealed a significant decrease.

4. During COVID-19 pandemic, how has your daily intake of fruits and vegetables changed? (Figure 4).

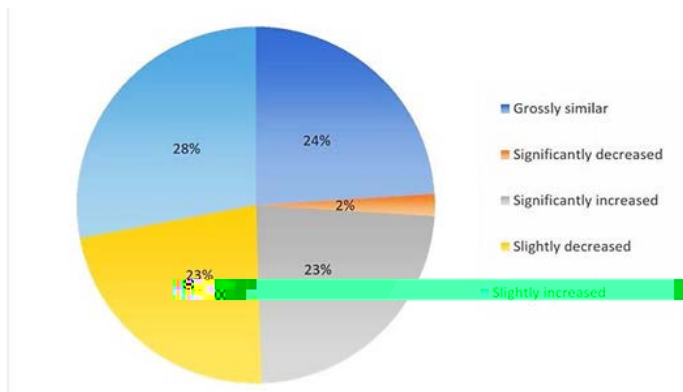


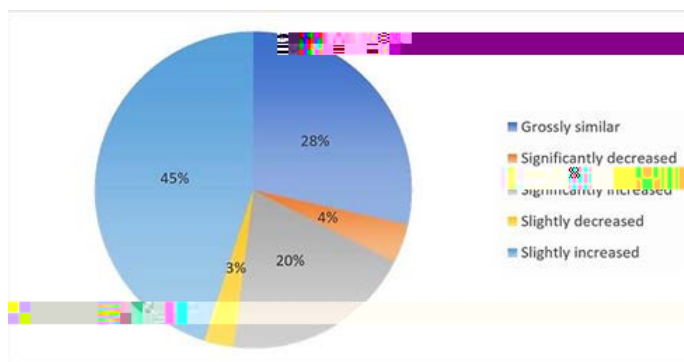
Figure 4. Response of subjects on changes in daily intake of fruits and vegetables during COVID-19 pandemic.

From the above pie chart pertaining to the changes in the daily intake of fruits and vegetables among the selected subjects, it is evident that 28% of the subjects revealed slight increased changes; 24% revealed a gross similar change; 23% revealed slight decrease; 23% revealed a significant increase; 2% revealed significant decrease.

5. During COVID-19 pandemic, how has your intake of a basehe sub(d c)6 (h)3 83 0 Td[(D(o)11 d(a 5a)-5 ((o)11 9 (.5 (in)19u(in)19u17 (VID-19 p

From the above pie chart pertaining to the changes in the consumption of sweets/candies/chocolate among the selected subjects, it is evident that 33% of the subjects revealed gross similar changes; 31% revealed slight decrease; 16% revealed a slight increase; 16% revealed significant decrease; 4% revealed a significant increase.

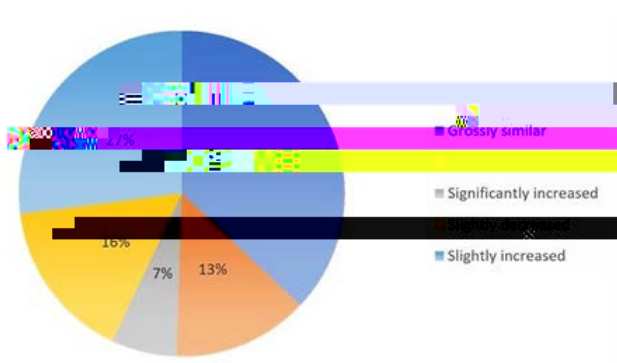
9. During COVID-19 pandemic, how has your participation in cooking new/traditional recipes changed? (Figure 9).



10. Response of subjects on changes in participation in cooking new/traditional recipes during COVID-19 pandemic.

From the above pie chart pertaining to the changes in the participation in cooking new/traditional recipes among the selected subjects, it is evident that 45% of the subjects revealed slight increased changes; 28% revealed gross similar changes; 20% revealed a significant increase; 4% revealed a significant decrease; 3% revealed a slight decrease.

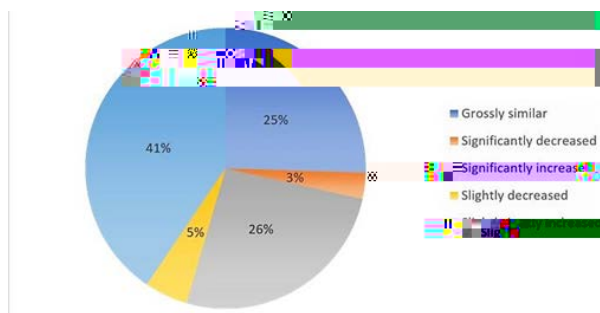
10. During COVID-19 pandemic, how has your consumption of unhealthy food when you are bored or stressed or upset changed? (Figure 10).



10. Response of subjects on changes in consumption of unhealthy food when bored or upset during COVID-19 pandemic.

From the above pie chart pertaining to the changes in the consumption of unhealthy food when they are bored or upset among the selected subjects, it is evident that 37% of the subjects revealed gross similar changes; 27% revealed a slight increase; 16% revealed a slight decrease; 13% revealed a significant decrease; 7% revealed significant increase.

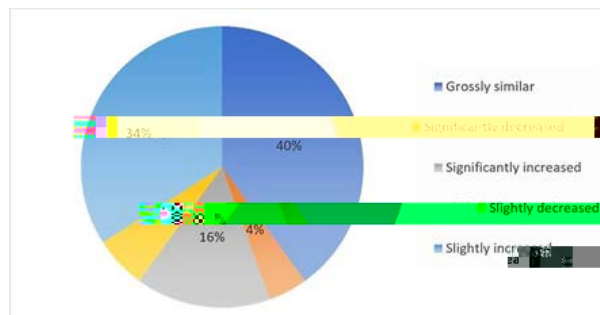
11. During COVID-19 pandemic, how has your intake of immunity boosting foods (decrease; fruits and green leafy vegetables) in the diet changed? (Figure 11).



11. Response of subjects on changes in intake of immunity-boosting foods in diet during COVID-19 pandemic.

From the above pie chart pertaining to the changes in the habit of intake of immunity boosting foods such as decrease; fruits and green leafy vegetables among the selected subjects, it is evident that 41% of the subjects revealed slight increase changes; 26% revealed a significant increase; 25% of the subjects revealed gross similar changes; 5% revealed slight decrease; 3% revealed a significant decrease.

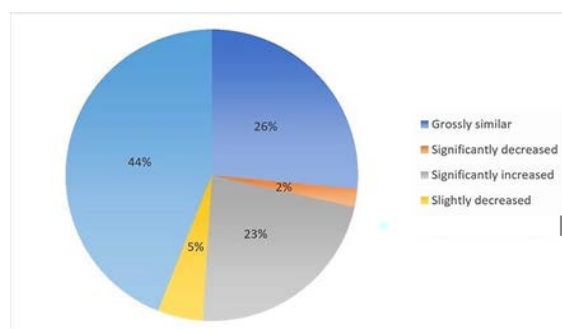
12. During COVID-19 pandemic, how has your intake of nutrition supplements to boost immunity changed? (Figure 12).



12. Response of subjects on changes in intake of nutrition supplements to boost immunity during COVID-19 pandemic.

From the above pie chart pertaining to the changes in the habit of intake of nutrition supplement to boost immunity change among the selected subjects it is evident that 40% of the subjects revealed gross similar changes; 34% revealed a slight increase; 16% revealed a significant increase; 6% revealed a slight decrease; 4% revealed significant decrease.

13. During COVID-19 pandemic, how has the support of your family and friends in eating healthy changed? (Figure 13).



13. Response of subjects on changes in support of your family and friends in eating healthy during COVID-19 pandemic.

and friends in eating healthy during COVID-19 pandemic.

From the above pie chart pertaining to the changes in the hours of sleep among the selected subjects, it is evident that 40% of the subjects revealed slight increase changes; 25% revealed grossly similar changes; 22% revealed signi cant increase; 9% revealed slight decrease; 4% revealed a signi cant decrease.

19. During COVID-19 pandemic, how has your quality of sleep changed? (Figure 19).

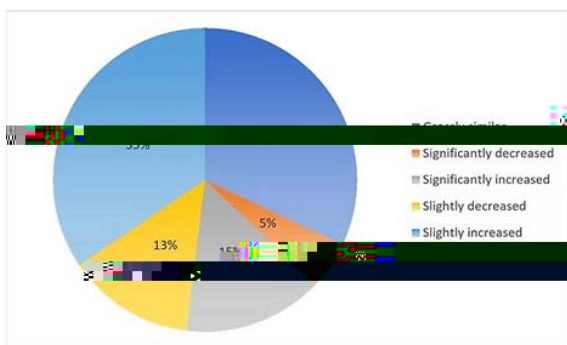


Figure 19. Response of subjects on changes in sleep quality during COVID-19 pandemic.

From the above pie chart pertaining to the changes in the quality of sleep among the selected subjects, it is evident that 35% of the subjects revealed slight increased changes; 32% revealed grossly similar changes; 15% revealed signi cant increase; 13% revealed slight decrease; 5% revealed signi cant decrease.

20. During COVID-19 pandemic, how have your stress and anxiety

levels changed? (Figure 20).

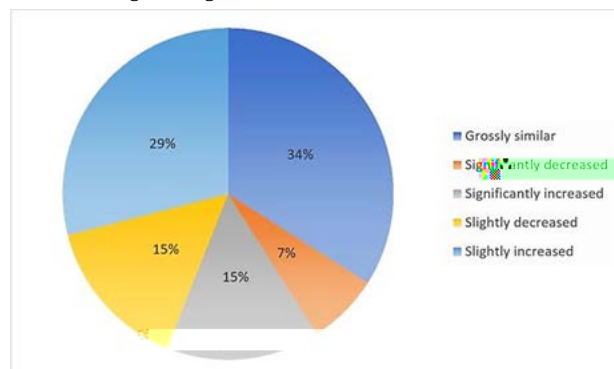


Figure 20. Response of subjects on changes in level of stress and anxiety during COVID-19 pandemic.

From the above pie chart pertaining to the changes in the levels of stress and anxiety among the selected subjects, it is evident that 34% of the

CONCLUSION
Based on the assessment of lifestyle related behaviour changes during

- It was observed that the hours of sleep during COVID-19 had increased.
- It was observed that the quality of sleep during COVID-19 had increased.
- It was observed that the stress and anxiety levels during COVID-19 did not change and was grossly similar.

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