ASSESMENT OF CORRELATION IMPACT OF DEFICIENT INTAKE OF RDA ON HEALTH

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Abstract

This study is conducted for the information collected by survey represented the different intake of nutrients in respondents male and female. The survey value compared with RDA value and found deficient percent and increment energy value found that 1418.4 deficient in males and 1081.2 in females whereas, the protein intake value compared with RDA 16.7 percent increment found in males and 20.8 in females. Calcium intake value compared with RDA 415.5 increment in males and 383.8 found in females. Iron intake value compared with RDA 2.89 increment in males and 11.8 deficiency found in females. B1 intake value compared with RDA 0.74 increment in males and 1.31 deficiency found in females. C intake value compared with RDA 25.3 deficient in males and 37.6 found in females. An intake value compared with RDA 755.5 deficient in males and 63.9 found in females. They take a large amount of energy and fat. After all, they consume more fast food and rice because they easily make and take less time to cook. Vitamins deficient like vitamin A and C vitamins because they consume less fruit. After all, fruits are costly. Vitamin B1 and B2 found increment because they consumed whole grain foods like rice, and fast foods are cheaply easily locally available food.

Keywords: *Food habits, Dietary intake, Exercise, RDA*

1. INTRODUCTION:

The research aims to study the effect of exercise practices and the physical mental health and well-being of individuals of Kanpur. The present study is an attempt to see the awareness of exercise and good dietary habits among people and also to analyze the adoption of good dietary baits and exercise by the various respondents during that pandemic. In this study, we will cover positive aspects of exercise practices as well as the benefits of exercise practices on mental and physical health and the adoption of good dietary habits among people. This study will help collect the data from respondents from different areas of Kanpur to know about dietary habits and exercise adoption among respondents and to promote good dietary habits and hygiene and sanitation among people. Nora Suleiman, Martos Rubén, A. García-Lara, María Begoña Martos, Cabrera Luis Albendín,García José Luis, Romero-Béjar Guillermo A. Cañadas, De la Fuente José, L. Gómez-Urquiza, **(2021)** studied that, one of the main public health problems among children and adolescents is poor adherence to healthy habits, leading to increasingly high rates of obesity and the comorbidities that accompany obesity. Early interventions are necessary, and among them, the use of gamification can be an effective method. The objective was to analyse the effect of game-based interventions (gamification) on improving nutritional habits, knowledge, and changes in body composition. A systematic review and meta-analysis were performed in CINAHL, EMBASE, LILACS, MEDLINE, Schiele, and Scopus databases, following the PRISMA recommendations. Only randomized controlled trials were included. Twenty-three articles were found. After the intervention, the consumption of fruit and vegetables increased, as well as the knowledge of healthy food groups. The means difference showed a higher nutritional knowledge score in the intervention group 95% CI 0.88 (0.05–1.75). No significant effect of gamification was found for body mass index z-score. Gamification could be an effective method to improve nutritional knowledge about healthier nutritional habits. Promoting the development of effective educational tools to support learning related to nutrition is necessary to avoid and prevent chronic diseases

3. Methodology and experimentation:

In order to gain a rich and extensive understanding of experience into people's lives during this pandemic and their efforts to maintain a healthy lifestyle, a qualitative approach was adopted for the study. We used interview Analysis to delve into the participants' perceptions and to provide a close picture of participants' unique experiences during the pandemic.

Respondents; a homogenous sample of 100 respondents was selected for this study. The criterion- based purposive sampling technique was used to identify and select the participants. We first contacted the local area respondents and sought their constant to help us in the conduction of this study. Upon consent, we requested them to provide us with the details of their regular gym members who continuously do to the yoga and to fitness exercise for at least 6 months prior to the imposed lockdown. Once the list was generated, the prospective participants were requested for their consent to participate. Those who consented for their inclusion in the study then asked some questions based on the decided questionnaire for the study. On the basis of this information, those participants who met the inclusion criteria (i.e., those who were continuing fitness workout in their home or hostels and were following strict home confinement measures during the covid- 19 pandemic and subsequent lockdown) were further contacted and requested to provide an appointment for a interview.

Inclusion and exclusion criteria for respondents: The respondents meeting the following criteria were included in the study:

4. Result and discussion:

Distribution of respondents on the basis of age

Frequency	Age group	Percentage
40	20- 25	40%
34	26- 30	34%
8	31- 35	8%
18	36- 40	18%
100	Total	100%

Distribution of respondents on the basis of BMI

BMI	Frequency	Percentage
16-18	27	27%
19-22	47	47%
23-25	23	23%
25- 30	3	3%
Total	100	100

The table shows that 27 percent of respondents were under the 16 – 18 BMI, 47 percent respondents came into under the 19 – 22 BMI, 23 percent respondents came into the 23 – 25 under BMI, 3 percent of respondents came into the 25- 30 BMI and they are the food loving person and wants to taste the new things so they were eats so much without hunger.

Distribution of the respondents on the basis of lifestyle

Question	Yes		No	
	N	Percentage	N	Percentage
Get up early in the morning	70	70%	30	30%
Have time you get up	64	64%	41	41%
Go to exercise and walk in morning	40	40%	60	60%
Drink purified water or tap water	44	44%	56	56%
Drink luke warm water in the morning	41	41%	59	59%
Total	100	100	100	100

The above table reveals that 70 percent of respondents were get up early in the morning due to household work and due to supply of government tap water and some of them for their health,30 percent of respondents were not get up early in the morning because they were not interested in getting early in the morning because they were like morning time sleep, 64 percent were getting it at 8: p.m. and 41 percent were not getting it at 9 p.m.; 40 percent were doing exercise daily and 60 percent were not doing exercise daily due to a busy schedule and they were not aware of the benefits of exercise; 44 percent were drinking purified water and 56 percent were drinking tap water; because they cannot afford clean and mineral water 41 percent were drinking lukewarm water in the morning; and 59 percent were not drinking any liquid in the morning because they had knowledge about the benefits of lukewarm water.

Distribution of the respondents on the basis of Hygiene and sanitation

Question	Yes		No	
	N	Percentage	N	Percentage
Take Daily shower	78	78%	18	18%
Wash cloths daily	68	68%	32	32%
Brushing teeth after taking food	86	86%	14	14%
Wash your hand before taking food	50	50%	50	50%
Wear mask at work place	36	36%	64	64%
Total	100	100%	100	100%

The table shows that 78 percent of respondents were take shower in the morning and 18 percent of respondents were not take shower on time, 68 percent of respondents were wash their clothes daily and 32 percent of respondents were not wash their clothes daily due to their busy schedules and in which most of the students wash their cloths on weekly basis, 86 percent respondents brushed their teeth daily and 14 percent respondents don't brushed their teeth daily because they forgot to brushing teeth, 50 percent respondents washed their hands before eating the foods and 50 percent respondents were not washing their hand before taking the food because they don't aware about hand wash before eaten food is a good habit and don't know about it can reduce the risk of bacteria which can caused viral disease 36 percent respondents were wearing the mask at their work place after the pandemic and they know about viral disease which is caused by contact with bacteria and 64 percent of respondents were not wearing the mask at their workplace because they felt suffocation and don't aware about viral disease.

Distribution of respondents on the basis of immunity awarness

Question	Yes		No	
	N	Percentage	N	Percentage
Covid – 19 Vaccine	78	78%	22	22%
During pandemic any type precaution you used	44	44%	55	55%
Changes done in food at pandemic time	36	36%	64	64%
Take additional immunity boaster in diet	48	48%	52	52%
Total	100	100%	100	100%

The table shows that the 78 percent of respondent were vaccinated and 22 percent respondents were not vaccinated due to fear of side effects after vaccination, 44 percent of respondents were use precautions at pandemic time and 55 percent respondents were not using precaution at the pandemic time due to lack of money, 36 percent respondents were done changes in food habits at a pandemic time because they know about the food components and they add some additional immunity booster food e.g. add some fennel and eat some jiggery after dinner and 64 percent respondents did not do any type of change at pandemic time because they don't know role of food in health, 48 percent of respondents were take immunity boosters in their daily routine and 52 percent of respondents were not take immunity boosters because their poor financial condition and they don't know about immunity boosters.

Distribution of respondents on the basis of clinical nutrition

Appearance	Frequency	Percentage
Good	72	72%
Fair	16	16%
Poor	12	12%
Total	100	100
Eyes		
Spots	14	14%
Conjunctiva xeroiss	0	0%
Corneal xeroiss	4	4%
Keratomalacia	5	5%
Pigmentation	14	14%
Night blindness	1	1%
Other	62	62%
Total	100	100%
Tongue		
Red	9	9%
Pale	3	3%

White	29	29%
Normal	59	59%
Total	100	100%
Lips		
Angular stomatitis	3	3%
Angular seats	4	4%
Chellosis	27	27%
Normal	66	66%
Total	100	100%
Gums		
Bleeding	9	9%
Swelling	15	15%
Normal	76	76%
Total	100	100

The table indicates the distribution based on the assessment of appearance in respondents 72 percent were having good appearance because they were follow a particular skin routine e.g. use Aloevera Gel and wash their face three time in a day and drink lots of water and eat some juicy vegetables 16 percent were having fair appearance because of lack of consumption of fruit and they having a allergy to dust and 12 percent were having poor appearance because of their malnutrition and some type of disease and they don't follow a good routine and their lifestyle was not well.

The above Table reveals that a maximum of 62 percent of respondents were having other eyes problem or normal eyes, because of their pollutants or dust. 5 percent of respondents were having spots in their eyes, 4 percent of respondents were having corneal xerosis and 0 percent of respondents were having Keratomalacia and 14 percent of respondents were having pigmentation in their eyes, 14 percent respondents have Myopia because of lack consumption of Vitamin-A rich food, 1 percent was having their night blindness. The above Table reveals that a maximum of 59 percent of respondents were having normal tongue, 9 percent of respondents were having red tongues because of canker core and 3 percent were having pale tongue because of fever and 29 percent were having white coating tongue which was cause by the bacteria and dead cell. The above table reveals that a maximum of 66 percent of respondents had normal lips, 3 percent of respondents were having angular stomatitis, 4 percent were having angular seats, and 27 percent were having chillosis because they consumed too much fat in their diet and used some type of moisturizer, and that moisture caused chillosis in that person. The above table reveals that a maximum of 76 percent of respondents had normal gums, 9 percent had bleeding problems in their gums because they were suffering from scurvy and had not consumed fruits, so as a result they were vitamin C deficient, and 15 percent had swelling in their gums due to sensitivity to toothpaste or mouthwash.

Distribution of the respondent on the basis of nutritional awareness

Do you know	Yes			No			S.D.
	N	%	Mean	N	%	Mean	
About food component	70	70%	7.0	30	30%	3.0	28.284
About balance diet	71	71%	7.1	29	29%	2.9	29.698
About carbohydrate	73	73%	7.3	27	27%	2.7	32.526
About function and sources	61	61%	6.1	38	38%	3.8	16.263
About Protein	57	57%	5.7	52	52%	5.2	3.535
About function and sources	49%	49%	4.9	51	51%	5.1	1.144
About Fat	50	50%	5.0	50	50%	5.0	0
About function and sources	48	48%	4.8	52	52%	5.2	2.828
About vitamins	48	48%	4.8	52	52%	5.2	2.828
About water soluble vitamins	45	45%	4.5	52	52%	5.2	4.949
About fat soluble vitamins	42	42%	4.2	58	58%	5.8	11.313
Function and source water soluble vitamins	48	48%	4.8	51	51%	5.1	2.121
Function and source of fat soluble	45	45%	4.5	55	55%	5.5	7.071
About vitamin A	41	41%	4.1	58	58%	5.8	12.020
Vitamin A deficiency disease	41	41%	4.1	58	58%	5.8	12.020
About vitamin D	41	41%	4.1	59	59%	5.9	12.727
Vitamin D deficiency disease	39	39%	3.9	59	59%	5.9	14.142
About vitamin B	38	38%	3.8	62	62%	6.2	16.970
Function and sources	37	37%	3.7	63	63%	6.2	18.384
About vitamin C	36	36%	3.6	64	64%	6.4	19.798
Sources and function	36	36%	3.6	64	64%	6.4	19.798
Vitamin C deficiency disease	36	36%	3.6	64	64%	6.4	19.798
About antioxidant	36	36%	3.6	63	63%	6.3	19.091
About function of antioxidant	36	36%	3.6	63	63%	6.3	19.091

The table shows that 70 percent of respondents knew about food components and 30 percent of respondents did not know about food components, 71 percent respondents knew about a balanced diet because they were educated and 29% percent respondents did not know about a balanced diet because they have proper knowledge about food components, 73 percent

of respondents were know about carbohydrates because their surroundings know about carbohydrate and 27 percent of respondents were don't know about carbohydrates, 61 percent respondents were known about and 38 % percent, 57 percent of respondents were know about protein in form of base for body cells and 52 percent of respondents were not know about protein because of their illiteracy, 50 percent of respondents were don't know about fat and 50 percent don't know about fat because they were don't know about oil is a form of fat, 48 percent of respondents were know about function and source of fat and 52 percent of respondents were the function and source of fat because their family members know about fat and their sources, 48 percent of respondents knew about vitamins, and 52 percent of respondents knew about vitamins, 42 percent of respondents were know about fat-soluble vitamins and 58 percent of respondents don't know about fat-soluble vitamins, 48 percent of respondents knew about functions and sources of water-soluble vitamins and 51 percent of respondents were don't know about function and sources of water-soluble vitamins due to illiteracy, 45 percent respondents know about the function and sources of fat-soluble vitamins and 55 percent of respondents did not know about function and sources of fat-soluble vitamins, 41 percent of respondents knew about vitamin A and 58 percent of respondents did not know about vitamin A and that was the main cause of vitamin A deficiency, 41 percent of respondents knew about vitamin A deficiency and awareness about vitamin A intake and 58 percent respondents did not know about vitamin A deficiency and that was a main cause of vitamin A deficient in respondents and most of them wear specks, 41 percent respondents knew about vitamin D and 59 percent of respondents were don't know about vitamin D deficiency and that was the main cause of muscular pain in respondents and they did not know about that due to any awareness about a proper bone function, 39 percent of respondents knew about deficiency disease of vitamin D and 59 percent of respondents were not know about vitamin D deficiency disease because most of them do not understand that and problems due to vitamin D deficiency, 38 percent of respondents were know about vitamin B and 62 percent of respondents were not know about vitamin because they were not students of the science stream and nutrition stream so most of them don't know about vitamin B's importance in their diet, 37 percent respondents know about the function and sources of vitamin B and 63 percent respondents did not know about the function and sources of vitamin B, 36 percent respondents know about vitamin C because at the time of the pandemic they listen about it on many news channels and lots of people were talking about it and their importance and 64 percent of respondents did not know about vitamin c because they were listening to only its name they did not know about their importance, 36 percent of respondents knew about vitamin sources and the function of vitamin C in the form of citrus fruit and 64 percent of respondents were respondents did not know about the function and sources of vitamin C, 36 percent of respondents did not know about vitamin C deficiency disease and they knew its deficiency is the main cause for gums related disease, and 64 percent of respondents did not know about vitamin C deficiency disease because they listened about were not know what is it and what's important in the diet, 36 percent respondents knew about antioxidants and they knew about it in form of turmeric only because they were listening to it about by news channels and 63 percent of respondent did not know about antioxidants because they did not listen about it before, 36 percent of respondents knew about the function of the antioxidant in the body in the form of it makes immunity strong and 63 percent respondents did not know about the function of antioxidants because during the pandemic time most of them were not listen about it and don't know about it anything exceptional name.

Summary &Conclusion:

Salic Balmier, (2021) due to the highly infectious virus known as COVID-19 impacting the lives of the populace, more than any other event in recent memory, there is a pandemic in the world. To determine food purchasing behaviour and eating habits, food preservation techniques, and source of knowledge about COVID-19, 992 consumers living in İstanbul, the most populous city in Turkey, were surveyed. The questionnaire was disseminated to participants via an online platform. Thirty questions, including the demographics of participants, changes in purchasing behaviour, knowledge, and attitudes about food preservation techniques, changes in eating habits, and sources of knowledge about COVID-19, were asked. During the survey in late March 2020 and late December 2020, about 65% of respondents have tried to consume more food that boosts the immune system and 58% of the respondents have been more willing to buy fresh products. Consumers have greatly adopted preserving food kinds of stuff by freezing during quarantine days. This survey revealed that the effective use of media tools could increase awareness and lead to behavioural changes that can reduce the spread of COVID-19, especially in consumers aged over 65 years loneliness and isolation, and to alleviate the workload of both formal and informal caregivers. This paper presents the first extensive survey and discussion on just how socially assistive robots have specifically helped this population, as well as the overall impact on health and the acceptance of such robots during the pandemic. The goal of this review is to answer research questions concerning which SARs were used during the pandemic and what specific tasks they were used for, and what the enablers and barriers were to the implementation of SARs during the pandemic. We will also discuss lessons learned from their use to inform future SAR design and applications and increase their usefulness and adoption in a post-pandemic world. More research is still needed to investigate and appreciate the user experience of older adults with SARs during the pandemic, and we aim to provide a roadmap for researchers and stakeholders.

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