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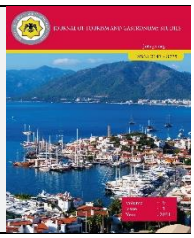

Investigation of Healthy Lifestyle Habits of Class Teacher Candidates in the Covid-19 Period

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Abstract

This research was conducted to determine the healthy lifestyle habits of primary school teacher candidates during the covid-19 process. In the research 132 (99 Female, 33 Male) volunteer classroom teacher candidates who were studying at Fırat University Faculty of Education and selected by random sampling method participated. "Personal Information Form" was applied to determine the demographic information of the participants, and an online questionnaire form was applied to determine the nutritional habits and physical activity levels. Results; Differences were observed in the dietary habits and physical activity levels of the research group before and after the pandemic period. It has been determined that the pandemic period caused changes in the eating habits of the participants and that most of them changed in the number of meals, daily fluid consumption and the foods they consumed during snacks. During the pandemic period, it was seen that the majority of the research group did not do physical activity regularly and there was a decrease in physical activity, an increase in body weight and they did their physical activities at home. As a result, it was observed that the nutrition habits of class teacher candidates were negatively affected and their physical activity levels decreased during the Covid-19 process. It is thought that informing individuals about healthy nutrition and physical activity will positively affect their quality of life.

Article Type

Research Article

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INTRODUCTION

Corona virus pandemic (Covid-19), which was first seen in the People's Republic of China in late 2019, started to show its effect almost all over the world in 2020. On January 12, 2020, the World Health Organization (WHO) announced that there were 41 confirmed cases of viral severe acute respiratory syndrome after a new corona virus outbreak in December 2019 in Wuhan, Hubei Province of the People's Republic of China. Covid-19 is coronavirus-2, a severe acute respiratory syndrome that is highly contagious through human interaction (Göksel, 2020). Recently, from similar outbreaks of other infectious diseases such as Ebola and SARS (Barabasi, 2015), it is known that it is important to get prepared for pandemics and reduce the risk of global spread by health and political authorities. There is no other solution but to take a pandemic decision for such an effective disease that has no specific treatment, no drug or vaccine, and is spreading rapidly globally and can create major problems for health systems (Parnell et al. 2020).

Since its emerging, the covid-19 outbreak has spread to almost all countries of the world. Social and physical distancing measures, which have become widespread to prevent the spread of the disease, negatively affect many regular aspects of life, including sports and physical activity, with the locking of businesses, schools and general social life (Caner et al. 2020).

The results obtained from the follow-up studies show that SARS-CoV2 creates greater problems in the elderly comorbid and hypoalbuminemic patients. Considering the indirect results, it is emphasized that nutrition is very important factor in preventing and treating Covid-19. Sarcopenia and high body mass index are associated with poor prognosis in cases with Covid-19. In addition, malnutrition is one of the negative prognostic factors (Laviano et al. 2020). In case follow-up studies, it has been observed that low plasma prealbumin level, which is one of the indicators of malnutrition, accelerates respiratory failure and the transition to mechanical ventilation in patients with SARS-CoV-2 (Caccialanza et al. 2020). Like all viral infections, Covid-19 is more common in individuals with weak immune systems. Weak immune system is also an invitation for diseases such as diabetes, cancer, etc like viral infections (Beck, 2007). Individuals must meet their biological, psychological, social and cultural needs in order to survive. (Baysal et al. 2011); One of the most important needs is nutrition (Eken, 2018). Nutrition is the use in the body by consuming nutrients that provide the nutrients and bioactive components necessary for the maintenance of life, growth and development, improvement, protection and development of health, improving the quality of life, and ensuring productivity (TUBER, 2015). Nutrition is one of the most important topics to be focused on today. Nutrition is defined as the use of nutrients in the body in order to sustain life and protect health. In other words, it is a behavior that aims to take the nutrients needed by the body in sufficient amounts and at the appropriate time in order to protect health and increase the quality of life (Arı & Arslan, 2020).

Studies in the literature have shown that an increase in the physical activity level of students studying at universities increases their quality of life (Thome & Espelage, 2004; Tekin, 2009). In our age, it is seen that physical activity levels decrease more due to greater dependence on technology (Hu, 2003). Especially the process we are in causes the physical activities of university students to decrease even more. Both the distance education process and the current pandemic process increase the sedentary lives of students. It is thought that this increase in sedentary life may negatively affect students' quality of life and mood.

Along with providing nutrition, growth and development, it plays an important role in the protection of diseases, especially in the protection of mental states, protection of physical and mental functions and regulation of the immune system. The immune system is the body's natural defense system. Cells are complex structures made up of tissues and organs. There is a relationship among nutrition, the immune system and infections. A healthy diet is very important for improving the immune response and protection from infections. A healthy nutrition habit strengthens the immune system and prevents viral infections (Dilber & Dilber, 2020).

Within the scope of Covid-19 measures, it is possible that people's being immobile at home will trigger both mental and physical problems. There are many studies investigating the effect of a healthy diet on the immune system (Chinchu et al. 2020; Mousavi & Saboori, 2020; Tavvafian et al. 2020; Nieman & Wentz, 2019). Therefore, exercise is recommended to be done regularly, especially before catching the disease, as it improves the immune system (Fisher & Heymann, 2020). Not going out and staying at home with the quarantine measures implemented during the epidemic has led to the restriction of people's physical activities. Quarantine causes the person to stay away from his daily routine, causing both a change in emotional state and a more sedentary life. Increased time spent at home, news of pandemics that are constantly being listened to and watched, increasing anxieties, increased desire to consume food (especially carbohydrate foods) and decreased physical activity may cause undesirable increases in body weight (Tural, 2020).

In this context, it depends on pre-service classroom teachers' regular physical activity as well as adequate and balanced nutrition in order to maintain healthy lifestyle habits and overcome the current pandemic period with minimum damage. This study was carried out to reveal the healthy lifestyle habits of classroom teacher candidates during the covid-19 process.

Method

Study Model

This study, which aims to determine the dietary habits of primary school teacher candidates during the covid-19 pandemic period, is in the screening model and has a descriptive quality.

Population and Sample

The ethics committee approval was obtained for this study from the ethics committee of Bitlis Eren University (Decision dated 22.12.2020 and numbered 2020/12-III-IV). The population of the research consisted of prospective classroom teachers studying at the Faculty of Education of Fırat University, and the sample group consisted of 132 (99 female, 33 male) classroom teacher candidates who were selected by random sampling method and participated in the research voluntarily. Survey method, one of the data collection techniques, was used in the research. As data collection tools, "Personal Information Form" consisting of 9 questions to determine the demographic information of the attendants was applied to the participants. In order to determine the nutritional habits, the questionnaire aimed at "Examination of Nutrition Habits and Nutrition Knowledge Levels of Healthcare Professionals" by Yucel (2015) and the short form of the "International Physical Activity Questionnaire", whose international validity and reliability studies were conducted by Craig et al. and national validity and reliability studies were conducted by Öztürk (2005) was adapted for the purpose of the research by taking the opinions of four experts in the field and it was applied to

the participants during the process. The validity and reliability of the survey questions applied in the study were tested; and the KMO value was found as .934 and the Cronbach alpha value was found as .983.

MET (Metabolic Equivalence) Calculation

1 MET = 3.5 ml / kg / min oxygen consumption

METx3.5x weight (kg) / 200 =… kcal / min.

According to the physical activity score, the physical activity levels of the participants are classified as "low, medium and high" (Devran and Saka, 2019):

- <3 MET mild activity,
- 3--6 MET of moderate activity,
- > 6 MET high intensity activity

Data Analysis

In the analysis of the data, SPSS package program was used. Determined to show normal distribution by looking at the normality test analysis "Kolmogorov-Smirnov" values, the data were applied to the Independent Samples t and One-Way Anova test for group comparisons. Significance level was accepted as $p < 0.05$.

Findings

Table 1. Demographic Information of Class Teacher Candidates

		f	**(%)**
Gender	Female	99	75
	Male	33	25
Age	18-22	105	79,5
	23-27	27	20,5
	Married	7	5,3
Marital Status	Single	125	94,7
	1st grade	20	15,2
Class	2nd grade	49	37,1
	3rd grade	25	18,9
	4th grade	38	28,8
	150-160	26	19,7
Height	161-170	64	48,5
	171-180	32	24,2
	181-190	10	7,6
	45-50	22	16,7
	51-60	59	44,7
Weight	61-70	20	15,2
	71-80	19	14,4
	81-90	12	9,1
	2000 TL and below	61	46,2
Income Status	2001-3000	25	18,9
	3001-4000	26	19,7
	4001-5000	20	15,2
Nutrition Education	Yes	27	20,5
	No	105	79,5
Chronic Disease	Yes	12	9,1
	No	120	90,9

When we look at Table 1 about gender, age, marital status, class, height, weight, income, nutritional education and chronic illness of the class teacher candidates who participated in the study; it was seen that there were 99 participants were women, 33 were men, 105 candidates were between 18-22 years old, 27 candidates were between 23-27 years old, 125 candidates were single, 7 were married, 20 candidates were studying in the first grade 49 candidates were studying in the 3rd grade, 25 candidates were studying in the 3rd grade and 38 candidates were studying in the 4th grade. In addition, it was determined that 26 candidates were between 150-160 cm, 64 candidates were between 161-170 cm, 32 candidates were between 171-180 cm and 12 were between 181-190 cm, 22 candidates were between 45-50 kg, 59 candidates were between 51-60 kg, 20 candidates were between 61 -70 kg, 19 candidates were between 71-80 kg and 12 candidates were between 81-90 kg body weight, 61 teacher candidates had income level 2000 TL and below, 25 teacher candidates had income level between 2001-3000 TL, 26 teacher candidates had income level between 3001-4000 TL and 20 teacher candidates had income level between 4001-5000 TL. It is seen that 79.5% of class teacher candidates participating in the research have not received nutrition training before and 90.9% of them do not have any chronic disease.

Table 2. Nutritional Knowledge Levels of Class Teacher Candidates

		f	**%**
Number of main meals per day	1 meal	-	-
	2 meals	77	58,3
	3 meals	55	41,7
	More	-	-
Skipping meals during the day	Breakfast	34	25,8
	Lunch	73	55,3
	Dinner	25	18,9
Reasons for skipping meals	Changes in nutritional habits	19	14,4
	Not feel like to eat	44	33,3
	Stress	9	6,8
	Changes in sleep patterns	16	12,1
	None	44	33,3
The most common types of food / drink consumed between meals	Carbonated / Acidic beverages	10	7,6
	Juice etc.	14	10,6
	Cake / Cookie / Biscuit	50	37,9
	Candy / Chocolate etc.	22	16,7
	Fruit / Dried fruit etc.	25	18,9
	Chips / Snack	11	8,3
Daily water consumption	1 liter	40	30,3
	1.5 liters	39	29,5
	2 liters	31	23,5
	2,5 liters and above	22	16,7

In Table 2, 58.3% of the class teacher candidates participating in the study consume two main meals a day, 55.3% of them do not regularly eat lunch, 33.3% of them skip meals because they do not feel like to, 37.9% of them consume fruit / dried fruit etc. And it was determined that 30.3% of them consume 1 liter of water per day.

Table 3. Physical Activity Levels of Class Teacher Candidates

		f	(%)
Do you do physical activity regularly?	Yes	23	17,4
	No	56	42,4
	Partly	53	40,2
How often do you exercise in a week?	Never	46	34,8
	Once	19	14,4
	Twice	22	16,7
	Three times	20	15,2
	Three times and more	25	18,9
Where do you do your physical activities?	At home	36	27,3
	Running / Walking Areas	36	27,3
	Sports Areas of the Municipality	31	23,5
	At Gyms	29	22
How many hours / minutes do you exercise per week?	Minute / average	86,67	

According to Table 3, it is observed that 42.4% of the class teacher candidates participating in the study do not do physical activity regularly, 18.9% of them do physical activity three days or more in a week, and 27.3% of them do their physical activities in the jogging or walking areas.

Nutritional Habits and Physical Activity Levels Frequency Analysis of Class Teacher Candidates in the Pandemic Period

Table 4. Nutritional Knowledge Levels of Class Teacher Candidates

	f	(%)	
Have there been any changes in the nutrition habits during the pandemic period?	Yes	62	47
	No	41	31,1
	Partly	29	22
Number of main meals per day	1 meal	17	12,9
	2 meals	30	22,7
	3 meals	34	25,8
	More	51	35,6
Skipping meals during the day	Breakfast	64	48,5
	Lunch	36	27,3
	Dinner	32	24,2
Have there been any changes in the types of food / beverage you consume for the snack during the pandemic?	Yes	47	35,6
	No	63	47,7
	Partly	22	16,7
Reasons for skipping meals	Changes in nutritional habits	18	13,6
	Not feel like to eat	68	51,5
	Increase in body weight	-	-
	Stress	46	34,8
	Changes in sleep patterns	-	-
	Workload	-	-
Have there been any changes in eating habits during the pandemic?	Yes	65	49,2
	No	37	28,0
	Partly	30	22,7
Has there been a change in daily fluid consumption?	Increased	52	39,4
	Decreased	27	20,5
	Unchanged	53	40,2
The most common types of food / beverages consumed between meals	Carbonated / Acid drinks	13	9,8
	Juice etc.	16	12,1
	Cake / Cookie / Biscuit	47	35,6
	Candy / Chocolate etc.	22	16,7
	Fruit / Dried fruit etc.	18	13,6
	Chips / Nuts etc.	16	12,1
Daily water consumption	1 liter or less	36	27,3
	1,5 liters	37	28
	2 liters	31	23,5
	2,5 liters	28	21,2

According to Table, it was observed that 47% of the class teacher candidates participating in the study had changes in their eating habits during the pandemic period, 35.6% of them consumed more than three main meals a day. The most skipped main meal was breakfast with the rate of 48.5% and it was determined that 51.5% of the participants skipped meals because they did not feel like to eat.

Table 5. Physical Activity Levels of Class Teacher Candidates

		f	**(%)**
Do you do physical activity regularly?	Yes	17	12,9
	No	83	62,9
	Partly	32	24,2
How often do you exercise in a week?	Never	60	45,5
	Once	20	15,2
	Twice	21	15,9
	Three times	16	12,1
	Three times and more	15	11,4
Has there been any change in your physical activity status?	Increased	20	15,2
	Decreased	71	53,8
	Unchanged	41	31,1
Where do you do your physical activities?	At home	62	47
	Running / Walking Areas	15	11,4
	I do not do physical activity	55	41,7
Do you believe home exercises are helpful?	Yes	62	47
	No	31	23,5
	Partly	39	29,5
Has the government's Stay Home Project affected your exercise?	Yes	39	29,5
	No	52	39,4
	Partly	41	31,1
Has your body weight changed?	Increased	73	55,3
	Decreased	20	15,2
	Unchanged	39	29,5
How many hours / minutes do you exercise per week?			
	Minute / average	61,55	

When Table 5 is evaluated, the majority of the class teacher candidates participating in the study did not regularly participate in a physical activity program. 15.9% of the participants did physical activity two days in a week, 55.3% of them gained weight and 47% of them stated that they did their physical activity at home. Also, the item "did the state's stay home project affect your physical activity? was replied as no by 39.4%, as partly by 31.1% and yes by 29.5% of the respondents.

Nutritional Habits and Physical Activity Levels t and Variance Analysis of Class Teacher Candidates before the Pandemic

Table 6. Class Teacher Candidates' Nutritional Habits and Nutritional Knowledge Levels t Test Analyzes According to Their Demographic Information

Nutrition		$\overline{X}$	**Sd**	**t**	**p**
Gender	Female	16,15	4,42	-10,908	**0,00**
	Male	7,58	1,48		
Age	18-22	12,14	4,35	-10,707	**0,00**
	23-27	21,26	1,45		
Marital Status	Single	13,50	5,08	-4,919	**0,00**
	Married	23,0	0,00		
Nutrition Education	Yes	7,04	1,01	-9,963	**0,00**
	No	15,80	4,52		
Chronic Disease	Yes	6,17	0,38	-5,933	**0,00**
	No	14,79	5,01		

$p<0,05$

Table 7. Class Teacher Candidates' Physical Activity and Nutritional Knowledge Levels t Test Analyzes According to Their Demographic Information

Physical Activity		$\overline{X}$	**Sd**	**t**	**p**
Gender	Female	8,65	2,48	-12,183	**0,00**
	Male	3,33	0,54		
Age	18-22	6,30	2,68	-9,353	**0,00**
	23-27	11,26	1,13		
Marital Status	Single	7,18	3,19	-2,086	**0,03**
	Married	9,71	0,95		
Nutrition Education	Yes	3,15	0,36	-10,320	**0,00**
	No	8,39	2,99		
Chronic Disease	Yes	3,00	0,00	-5,483	**0,00**
	No	7,75	2,62		

p<0,05

Table 8. Nutritional Habits Variance Analysis of Class Teacher Candidates According to Their Demographic Information

Nutrition		$\overline{X}$	**Sd**	**F**	**p**
Height	150-160 cm	6,96	0,95	289,529	**0,00**
	161-170 cm	12,55	2,63		
	171-180 cm	19,88	0,94		
	181-190 cm	22,90	0,31		
Weight	45-50 kg	6,68	0,71	424,035	**0,00**
	51-60 kg	11,56	2,07		
	61-70 kg	18,30	1,21		
	71-80 kg	21,10	1,42		
Grade	1st Grade	6,55	0,60	657,249	**0,00**
	2nd Grade	10,61	1,27		
	3rd Grade	16,24	1,76		
	4th Grade	20,84	1,40		
Income Status	2000 TL and below	9,03	1,94	385,671	**0,00**
	2001-3000	14,52	1,98		
	3001-4000	19,19	1,05		
	4001-5000	21,80	1,24		

p<0,05

Table 9. Physical Activity Levels Variance Analysis of Class Teacher Candidates According to Their Demographic Information

Physical Activity		$\overline{X}$	**Sd**	**F**	**p**
Height	150-160 cm	3,12	0,32	208,393	**0,00**
	161-170 cm	6,58	1,73		
	171-180 cm	11,31	0,73		
	181-190 cm	10,20	1,22		
Weight	45-50 kg	3,00	0,00	276,238	**0,00**
	51-60 kg	5,97	1,49		
	61-70 kg	10,00	0,79		
	71-80 kg	11,23	1,05		
Grade	1st Grade	3,00	0,00		
	2nd Grade	5,31	1,17	397,512	**0,00**
	3rd Grade	8,88	0,83		
	4th Grade	11,16	0,97		
Income Status	2000 TL and below	4,34	1,22	308,044	**0,00**
	2001-3000	7,92	0,99		
	3001-4000	10,81	0,80		
	4001-5000	11,10	1,25		

p<0,05

According to Tables 6, 7, 8 and 9; it was determined that there is a statistically significant difference between the mean scores of nutritional habits and physical activity levels according to the variables of gender, age, marital status, nutritional education, chronic illness, height, weight, class and income status of the class teacher candidates who participated in the study (p <0.05).

Nutritional Habits and Physical Activity Levels t and Variance Analysis of Class Teacher Candidates during the Pandemic

Table 10. Nutritional Habits t Test Analysis According to the Demographic Information of Class Teacher Candidates

Nutrition		$\overline{X}$	**Sd**	**t**	**p**
Gender	Female	23,80	6,81	-10,655	**0,00**
	Male	11,00	1,80		
Age	18-22	17,66	6,09	-11,614	**0,00**
	23-27	32,03	4,00		
Marital Status	Single	20,20	8,07	-2,464	0,15
	Married	27,85	6,38		
Nutrition Education	Yes	9,00	0,00	-9,187	**0,00**
	No	21,76	7,63		
Chronic Disease	Yes	9,00	0,00	-5,775	**0,00**
	No	21,76	7,63		

p<0,05

Table 11. Physical Activity Levels t Test Analysis According to the Demographic Class Teacher Candidates

Physical Activity		$\overline{X}$	**Sd**	t	**p**
Gender	Female	16,71	5,48	-9,188	**0,00**
	Male	7,87	0,96		
Age	18-22	12,38	4,88	-10,796	**0,00**
	23-27	22,77	2,02		
Marital Status	Single	14,18	6,10	-2,623	0,10
	Married	20,28	2,69		
Nutrition Education	Yes	10,55	1,69	-7,947	**0,00**
	No	23,19	7,07		
Chronic Disease	Yes	7,00	0,00	-4,818	**0,00**
	No	15,25	5,91		

p<0,05

Table 12. Nutritional Habits Variance Analysis of Class Teacher Candidates According to Their Demographic Information

Nutrition		$\overline{X}$	**Sd**	**F**	p
Height	150-160 cm	10,46	1,65	161,096	**0,00**
	161-170 cm	18,40	3,95		
	171-180 cm	30,40	3,79		
	181-190 cm	29,70	6,00		
Weight	45-50 kg	10,00	1,34	256,895	**0,00**
	51-60 kg	17,16	3,49		
	61-70 kg	25,00	1,86		
	71-80 kg	31,83	3,77		
Grade	1st Grade	9,75	1,11	323,899	**0,00**
	2nd Grade	15,75	2,68		
	3rd Grade	23,16	1,34		
	4th Grade	30,89	4,03		
Income Status	2000 TL and below	13,22	3,02	232,864	**0,00**
	2001-3000	21,72	1,54		
	3001-4000	28,26	3,63		
	4001-5000	31,75	4,64		

p<0,05

Table 13. Physical Activity Levels Variance Analysis of Class Teacher Candidates According to Their Demographic Information

Physical Activity		$\overline{X}$	**Sd**	**F**	**p**
Height	150-160 cm	7,57	0,85	251,182	**0,00**
	161-170 cm	12,17	2,97		
	171-180 cm	22,65	1,45		
	181-190 cm	21,40	2,83		
Weight	45-50 kg	7,31	0,64	337,273	**0,00**
	51-60 kg	11,22	2,40		
	61-70 kg	19,25	2,31		
	71-80 kg	22,80	1,88		
Grade	1st Grade	7,15	0,36	648,918	**0,00**
	2nd Grade	10,18	1,34		
	3rd Grade	16,52	2,02		
	4th Grade	22,63	1,76		
Income Status	2000 TL and below	8,85	1,35	446,871	**0,00**
	2001-3000	14,72	1,90		
	3001-4000	21,26	2,23		
	4001-5000	22,70	2,36		

p<0,05

According to Tables 10, 11, 12 and 13, it was determined that there is a statistically significant difference between the mean scores of nutritional habits and physical activity levels according to gender, age, nutritional education, chronic illness, height, weight, class and income variables of the class teacher candidates participating in the study (p<0.05). However, there was no statistically significant difference in terms of marital status variable (p> 0.05)

Physical Activity Levels t Test Analyzes of Class Teacher Candidates Before and During the Pandemic Period

Table 14. Physical Activity Levels t Test Analyzes of Class Teacher Candidates Before and During the Pandemic Period

		$\overline{X}$	**Sd**	**t**	**p**
Physical Activity	Pre-Pandemic	7,32	3,16	-26,401	**0,00**
	During the Pandemic	14,50	6,12		
Nutrition	Pre-Pandemic	14,01	5,39	-21,273	**0,00**
	During the Pandemic	20,60	8,15		

p<0,05

When Table 14 is examined, it has been determined that there is a statistically significant difference between the nutritional habits and physical activity levels of the class teacher candidates participating in the study during and before the pandemic (p <0.05).

Results and Discussion

According to nutritional habits of the research group during and before the pandemic period; before the pandemic, it was determined that 58.3% of the pre-service teachers had two main meals in a day, the most skipped meal was lunch with the rate of 55.3%. 33.3% of them skipped meals because they did not feel like to eat, 37.9% of the participants consumed mostly fruit / dried fruit, etc. for snack. It was also determined that 30.3% of them consumed 1 liter of water per day. During the pandemic period, 35.6% of the pre-service teachers had more than three meals a day, the main meal they skip most was breakfast with the rate 48.5%. 51.5% of them skipped meals because they did not feel like to eat, and 27.3% of them stated that they consume 1 liter or less of liquid. In addition, most of the

participants stated that there were changes in their nutritional habits during the pandemic period. Mattioli et al. (2020) stated in their study that encouraging healthy nutrition and regular physical activity during the pandemic period would reduce the risk of getting diseases and also overcome the epidemic period with minimum damage. In his study, Macit (2020) examined the changes in the nutritional habits of adults after the epidemic, and determined that the duration of stay at home was extended, the number of main and snack meals changed, the use of supplements increased, and the duration of physical activity decreased. Bozkurt and Erdogan (2019) found in their study that the nutritional habits and knowledge levels of class teachers were insufficient. In the study, examining the nutritional habits of patients with type 2 diabetes, Ruiz-Roso et al. (2020) determined that the participants adopted a vegetable-based diet during the epidemic period, but they stated that the consumption of sugary foods and snacks increased due to the pandemic and prolonged periods of stay at home. In a different study, Kaya et al. (2020) investigated the effects of fear and anxiety on nutrition and found that anxiety and feelings of fear caused changes in individuals' nutritional habits and food preferences during the pandemic period. de Faria Coelho-Ravagnani et al. (2020) in their review study, stated that during the Covid-19 outbreak the latest scientific literature and international organizations had advised that the most appropriate diet was to be with vitamin and mineral supplements as well as hygiene in food preparation. In their study, Sidor and Rzymski (2020) determined that there were changes in the nutritional habits of individuals in the restrictions applied in Poland during the epidemic period and that healthy foods such as vegetables and fruits were consumed less. Yilmaz and Eskici (2020), in their study evaluating the emotional and behavioral conditions of Turkish adults during the pandemic period, determined that the participants showed different symptoms of depression during the pandemic process and especially carbohydrate food consumption increased.

When the physical activity levels of the research group before and during the pandemic period are examined; It was determined that before the pandemic 42.4% of the teacher candidates did not do physical activity regularly, 27.3% of them exercised in running/walking areas and 34.8% of them did not participate in any exercise program. During the pandemic period, teacher candidates stated that 62.9% of them did not regularly do physical activity, 45.5% of them did not participate in any exercise program, 53.8% of them were negatively affected by physical activity, 47% of them did physical activity at home and 55.3% of them gained weight. Matsungo and Chopera (2020) found in their study that the quarantine process applied during the pandemic period affected the nutritional habits, decreased physical activity levels and increased body weight of adults in Zimbabwe. In a different study, Asl et al. (2020) determined that four-week online mindfulness yoga training during the coronavirus period would positively affect the psychological health of university students, and this effect might last for at least a month. Reyes-Olavarría et al. (2020), in a study examining the nutritional and physical activity levels of individuals during the Covid-19 epidemic, determined that there were changes in the nutritional habits, increases in their body weight and decreases in physical activity levels of the Chilean people compared to the pre-epidemic period. In the study, examining the exercise behavior and mood of individuals in Taiwan during the Covid-19 pandemic period, Chang et al. (2020) found that the majority of the participants did not change their exercise status. Punduk (2020) stated in his study that regular, moderate and for a certain period of exercise will improve the immune system and have a protective effect against Covid-19. Srivastav et al. (2020) found a significant decrease in the physical activity and energy expenditure levels of the participants compared to the pre-restriction period in the study in which they investigated the effects of the restrictions applied during the pandemic period on the physical activity levels of physiotherapists and students. In the study, examining the physical activity, quality of healthy life and stress levels of Chinese adults during the

Covid-19 epidemic, Qi et al. (2020) determined that the participants' physical activity levels decreased compared to the pre-pandemic period, long-term inactivity had a negative effect on the quality of healthy life and 53.6% of the participants had moderate stress level.

As a result; It was determined that the physical activity duration of the class teacher candidates decreased compared to the pre-pandemic period, and their nutritional habits were negatively affected. This research is limited to the students of Fırat University, Faculty of Education, Department of Classroom Teaching. In line with these limitations, some suggestions were made for future research.

- Encouraging physical activity and nutrition programs that can be applied at home in order to ensure that individuals reach the healthy lifestyle levels recommended by international organizations during the pandemic period.
- In the process of this Covid-19 epidemic, where the whole world and our country has been deeply affected in many ways, millions of people have been infected and more than one million people have lost their lives so far; Regular and frequent organization of trainings, seminars and events aimed at improving the healthy lifestyles of individuals can be extremely beneficial in terms of adapting to the new lifestyle with corona in our country and all over the world without much harm to health.
- Examining the effects of the Covid-19 outbreak on a larger sample group during the epidemic period will provide more information on the subject and enrich the research.

It is important for university students to be directed to various physical activities as much as their education.

Declaration

The contribution of all authors of the article to the article process is equal. The authors have no conflict of interest to declare. The ethics committee permission document required for the collection of data used in this study was obtained from the Ethics Committee of Bitlis Eren University with the date of 22.12.2020 and the decision/number of 2020/12-III-IV.

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