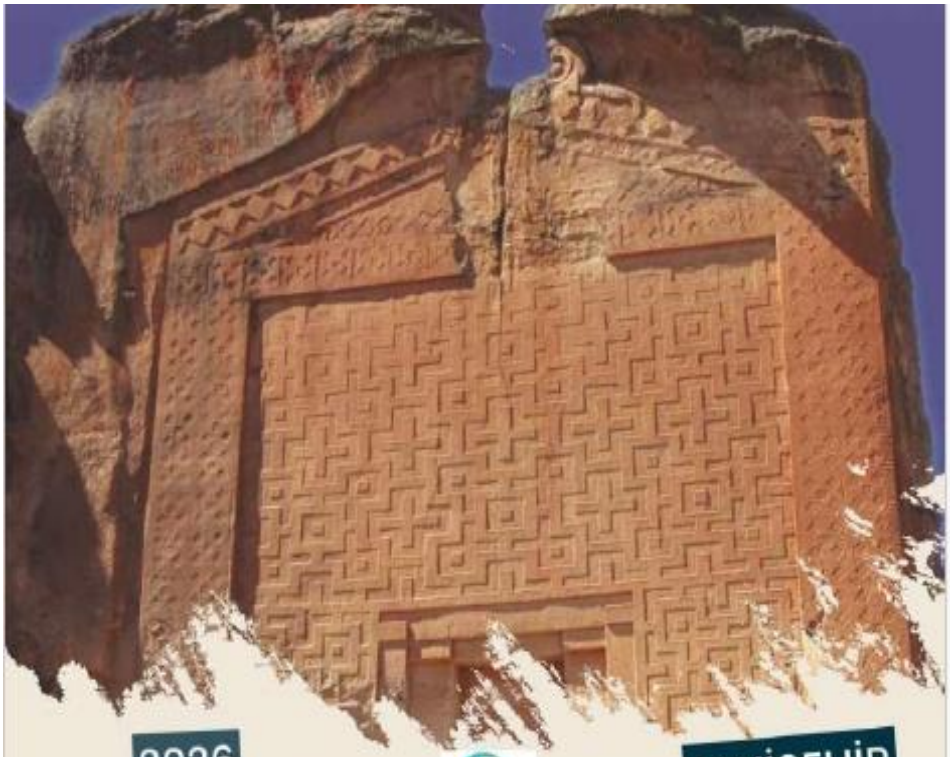

2026

24-25 OCAK

ESKİŞEHİR

III.BİLSEL ULUSLARARASI MİDAS BİLİMSEL ARAŞTIRMALAR KONGRESİ

KONGRE KİTABI

BİLSEL YAYINCILIK

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3. BİLSEL INTERNATIONAL MIDAS SCIENTIFIC RESEARCHES CONGRESS BOOK 24-25 January 2026 ESKİŞEHİR /TÜRKİYE

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3. BİLSEL INTERNATIONAL MIDAS SCIENTIFIC RESEARCHES CONGRESS

DATE and PLACE

24-25 January 2026 ESKİŞEHİR /TÜRKİYE

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25.01.2026
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SESSION-3 HALL-7

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Vasanth kumar M K. Rajesh Kumar B. Sharmila Mohamed Suhail Dr. S. Sathya	Takshashila University, Ongur, Tindivanam, Villupuram, TamiNadu-604305, India	PERSONALIZED MEDICINE AND PHARMACOGENOMICS TRANSFORMING GLOBAL DRUG THERAPY

ASSESSMENT OF LIFE STYLE BY YOUNG PEOPLE OLD 20-25 YEARS IN OUR POPULATION

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Abstract

Young people aged 20-25 in our society are adults, whether they are studying or not, employed or unemployed. At this age, they are more independent or completely independent of decisions about how they will spend their day in terms of sleep, physical activity and nutrition. The aim of our research was to assess the lifestyle of a group of young people by assessing their diet, physical activity and sleep. Material and method: To achieve our goal, we selected a group aged 20-25, because at this age they still carry the habits from home but are increasingly influenced by external information obtained through social networks. We created a questionnaire, which contained 3 parts. 1. General data, 2 Assessment of physical activity and sleep, 3. Assessment of nutrition habits. Results: A total 114 young people, were interweaved, The consummation of healthy food were positive significant, but consummation of bad food were significant also. The physical activity was significantly not high, but sedentary life and use of video terminals were significant. Discussion: Consumption of high-calorie foods, carbonated and sugary juices, as well as saturated fatty acids are considered the main cause of the increase in chronic metabolic and other diseases, and also the cause of death indirectly after heart and brain infarction, together with a sedentary lifestyle. Conclusion: Our study group showed that more social measures should be taken to reduce the consumption of fast food and sugary drinks and to increase physical activity because at their age there is still a chance to prevent the diseases of the modern world.

Key words: young people, assessment nutrition, physical activity.

Introduction

Young people aged 20-25 in our society are adults, whether they are studying or not, employed or unemployed. At this age, they are more independent or completely independent of decisions about how they will spend their day in terms of sleep, physical activity and nutrition. At this age, they are independent in their choice of food because they lose control of family habits, and if they work, they cannot observe regular meals, while in terms of free time they can also create it according to their personal worldview. (1,2)

Regarding cigarette consumption, as many as 40% of them consume them, and alcoholic beverages are consumed more by women than by men, according to data from the Institute of Public Health of our country.

The choice of food depends greatly on the habits acquired in the family, nutrition education in primary and secondary education, but also on the influence of the environment and advertising of products. The psychological moment of creating psychological satisfaction through food consumption is certainly a factor influencing what and how much will be consumed.

It is a well-known fact that processed carbohydrate foods, saturated fatty acids and carbonated products increase the energy intake of calories through food, and do not always meet nutritional needs.

The increased body weight of the population on a global level has increased. In early adulthood, there are still opportunities to regulate it and prevent it from becoming a cause of cardiovascular and metabolic diseases - such as type 2 diabetes. (3)

Consuming healthy foods reduces the risks of these and other diseases. Deficiency of prebiotics and probiotics in the diet can be a cause of inappropriate psychological reactions and mental disorders. (4)

Unhealthy food in many countries is cheaper and more easily available for consumption. It is more processed and can be quickly consumed in episodes of hunger at work during a break or on a student campus.

The marketing of carbonated products is in favor of advertisements with satisfied and happy young people. Carbonated products contain high-fructose corn syrup as a sweetener. 98% of fructose ingested in the body is converted into fatty acids and leads to fatty liver. All confectionery products also contain this sugar. Palm fat in our bakery and confectionery industry is mandatory and in many cases the only fat component, because it is cheaper than vegetable fats. Lard is not used because education about its harmfulness has deeply penetrated the population, and palm fat is easily available on the market and is not expensive. (5)

We belong to the southern part of Europe, where the influence of the Mediterranean diet has a significant place, but still the habits of continental regions and mountainous regions dominate somewhere. Traditional cooking methods have their advantages and disadvantages. The advantage is that they do not contain preservatives and additives, and are rich in vegetables. Disadvantages include the use of meat in larger quantities than 50 years ago, due to the availability and not so high price of farm-raised poultry. The use of zapriški and white sugar sorbet are part of the tradition. (6)

Through the mass media there are constantly cooking shows, the content of which is not always healthy and abounds with mayonnaise, sauces and fat additives.

Our country has a suitable climate for growing vegetables and fruits, but only 10% of production is organic. The lack of vegetables and fruits due to the lack of labor to work on farms is compensated by imports, which often contain illegal amounts of pesticides.(7)

The aim of our research was to assess the lifestyle of a group of young people by assessing their diet, physical activity and sleep.

Material and Method

To achieve our goal, we selected a group aged 20-25, because at this age they still carry the habits from home but are increasingly influenced by external information obtained through social networks. We created a questionnaire, which contained general data in the first part such as age, gender, and whether they know what their body mass index is. In the second part, we assessed physical activity by dividing it into weekly physical activity, and daily use of video terminals (computer, phone, games for entertainment, computer in the process of work or study) and an assessment of how much sleep they get per day. The third part consisted of an assessment of the consumption of healthy foods (vegetables, fruits, fish, legumes) and an assessment of the consumption of unhealthy foods (fast food, snacks, carbonated products, salami, mayonnaise, cola products). To assess the overall condition, we used a score, with each positive activity being determined as a percentage relative to 100% positive activity. E.g. How many of them consumed vegetables 3-5 pieces per day, that is, how many of them do not consume carbonated products. We determined the total score and significance with a T test and difference of proportions. The respondents in all categories were also compared by gender.

Results

Part 1 Personal data

A total of 114 respondents in the given age group were collected, of which 72 were female (63%) and 42 were male (37%). Since T=2.8, p <0.01, the two groups by gender will be considered separately. In the entire examined population, only 3 males and 3 females knew their body height and weight parameters, so that BMI could be calculated. Only 6 (5.3%) took care of their TT, and the remaining 108 did not care about it, which is an indicator that they do not care about weight as a health factor. T=9.5, p<0.01 was shown, i.e., the lack of care about one's own body weight is significant.

Part 2 Assessment of physical activity and duration of sleep

The results of these data are presented for females in Table 1, for males in Table 2.

Table 1 Assessment of physical activity, inactivity and sleep in females

Physical activity (PHA)	Yes 36 50%	No 36 50%			
(PHA) Yes n=36 Weekly in hours	<2 n=3	2 n=13	4 n=9	6 n=8	8 n=3
Does she use video terminals	Yes 55 76%	No 17 24%			
Use video terminals, n=55	<2 n=8	2 n=9	4 n=15	6 n=15	8 n=8
How many hours does she sleep per day	<6 n=1	6 n=18	7 n=12	8 n=28	10 n=13

Physical activity was performed by 50% or 36, of which 4-6 hours per week was carried out as the optimal amount by 17 respondents out of 36 or (24%). 17 (24%) did not use VT, of which optimally <2-4 hours per day (8+9+15) a total of 32 (58%) out of 55 who use it. Optimally 6-8 hours of sleep 58 (82%)

Total positive points 500, in our population it is (50+24+24+58+82)=238 (47.6%), T=1.07, p>0.01, not significant.

Table 2 Assessment of physical activity, inactivity and sleep in males

Physical activity (PHA)	Yes 29 69%	No13 31%			
(PHA) Yes n=29 Weekly in hours	<2 n=4	2 n=8	4 n=8	6 n=6	8 n=6
Does he use video terminals	Yes 36 86%	No 6 14%			
Use video terminals, n=36	<2 n=7	2 n=10	4 n=14	6 n=2	8 n=3
How many hours does he sleep per day	<6 n=2	6 n=8	7 n=9	8 n=17	10 n=6

Physical activity was performed by 69% or 29, of which 4-6 hours per week was the optimal amount carried out by 14 respondents out of 29 or (51%). 6 (14%) did not use VT, of which optimally <2-4 hours per day (7+10+14) a total of 31 (86%) out of 36 who use it. Optimally 6-8 hours of sleep 34 (81%)

Total positive points 500, in our population is (69+51+14+31+81) =246 (49.2%), T=1.08, p>0.01, not significant.

Part 3 Assessment of nutrition positive habits

Tables 3 and 4 show the positive habits of consuming an optimal 3-5 fruits and 3-5 vegetables, fish 2 times a week, and legumes 2-3 times a week

Table 3 Positive nutrition habits by females

Does she keep his meals?	Yes 47 65%	No25 35%				
How many meals per day?	<2 n=1	2 n=20	3 n=41	4 n=8	5 n=3	6 n=0
How many pieces of vegetables does she eat per day?	<1 n=11	1 n=13	2 n=16	3 n=18	4 n=6	5 n=8
How many pieces of fruit does she eat per day?	<1 n=6	1 n=20	2 n=23	3 n=15	4 n=3	5 n=0
How many times a week does she eat legumes?	<1 n=8	1 n=18	2 n=23	3 n=11	4 n=6	5 n=6
How many times a week does she eat fish?	<1 n=16	1 n=33	2 n=19	3 n=4	4	5
How many grams of meat does she eat per meal per day?	0 n=19	50 n=35	100 n=18			

From total 72 females 47 (65%) have meals, 52 (72%) have 3-5 meals, 32 (44%) eat vegetables 3-5 times a day, 41 (57%) eat fruits 3-5 times a day, 40 (56.5%) eat legumes (beans, peas, green beans, lentils) 2-4 times a week, 23 (32%) consume fish optimally 2-3 times a week, but if we take into account that in our country we do not have the habit of eating fish, because fresh fish is lacking, and if we also take into account those who eat 1 time a week, then 56 (78%) consume. Meat consumption is optimal according to body weight at 1 gram per body weight, so we will take 50-100 gr. per day as optimal and it amounts to 53 (74%).

In a total of 700 positive points, the situation in our country is as follows (65+72+44+57+56.5+78+74) 446.5 (64%).

Consumption of healthy food is 64%, out of the maximum 700 points, T=7.4, p<0.01, i.e. positive nutritional habits are significant.

Table 4 Positive nutrition habits by males

Does he keep his meals?	Yes 25 60%	No 17 40%				
How many meals per day?	<2 n=2	2 n=8	3 n=22	4 n=7	5 n=3	6 n=0
How many pieces of vegetables does he eat per day?	<1 n=4	1 n=10	2 n=13	3 n=12	4 n=2	5 n=1
How many pieces of fruit does he eat per day?	<1 n=5	1 n=12	2 n=13	3 n=9	4 n=2	5 n=1
How many times a week does he eat legumes?	<1 n=6	1 n=20	2 n=6	3 n=11	4 n=3	5 n=0
How many times a week does he eat fish?	<1 n=10	1 n=12	2 n=12	3 n=8	4	5
How many grams of meat does he eat per meal per day?	0 n=4	50 n=16	100 n=22			

From total 42 males, 25 (60%) observe the meals, 32 (76%) have 3-5 meals, vegetables receive 3-5 per day in total 15 (36%), fruits receive 3-5 per day 12 (28%), legumes (beans, peas, green beans, lentils) receive 2-4 times a week 20 (48%), optimally 2-3 times a week consume fish 20 (48%), but if we take into account that in our country there is no habit of eating fish, because fresh is lacking and those who eat 1 per week are also taken into account, then they consume 32 (76%). Meat consumption is optimal according to body weight at 1 gram per body weight, so for optimal we will take 50-100 gr. per day and it is 38 (90%).

In a total of 700 positive points, the situation in our country is as follows (60+76+36+28+48+77+90) 415 (60%).

The consumption of healthy food is 60%, out of the maximum 700 points, T=5.2, $p<0.01$, i.e. positive nutritional habits are significant.

Tables 5 and 6 show the negative nutritional habits and their prevalence in the surveyed population.

Table 5 Negative nutritive habits by females

How many times a week does she consume soda 250 ml.?	<1 n=17	1 n=15	2 n=9	3 n=19	4 n=1	5 n=11
How many times a week does she consume cola juice 250 ml.?	<1 n=22	1 n=12	2 n=17	3 n=8	4 n=2	5 n=11
How many times a week does she consume, salami, mayonnaise?	<1 n=17	1 n=13	2 n=12	3 n=16	4 n=6	5 n=8
How many times a week does she consume chips, snacks, etc.?	<1 n=6	1 n=10	2 n=19	3 n=13	4 n=10	5 n=14
How many times a week does she consume fast food (sandwiches, burek, etc.)?	<1 n=9	1 n=16	2 n=19	3 n=13	4 n=5	5 n=10

Consumption of carbonated juices 2-5 times a week is 40 (55%), Consumption of cola juices 2-5 times a week is 38 (53%), consumption of salami, mayonnaise 2-5 times a week is 42 (58%), consumption of chips, snacks and the like 2-5 times a week 56 (78%), consumption of fast food 2-5 times a week 47 (65%). In a total of 500 negative habits points, the situation in our country is as follows (55+53+58+78+65) 309 or (62%). Negative nutritional habits are significantly represented because T=5.33, and $p<0.01$

Table 6 Negative nutritive habits by males

How many times a week does he consume soda 250 ml.?	<1 n=7	1 n=8	2 n=5	3 n=9	4 n=3	5 n=10
How many times a week does he consume cola juice 250 ml.?	<1 n=8	1 n=9	2 n=6	3 n=9	4 n=1	5 n=9
How many times a week does he consume, salami, mayonnaise?	<1 n=9	1 n=9	2 n=9	3 n=12	4 n=2	5 n=1
How many times a week does he consume chips, snacks, etc.?	<1 n=9	1 n=5	2 n=12	3 n=8	4 n=2	5 n=6
How many times a week does she consume fast food (sandwiches, burek, etc.)?	<1 n=11	1 n=9	2 n=8	3 n=4	4 n=10	5

Consumption of carbonated juices 2-5 times a week is 27 (64%), Consumption of cola juices 2-5 times a week is 24 (57%), consumption of salami, mayonnaise 2-5 times a week is 24 (57%), consumption of chips, snacks and the like 2-5 times a week 28 (67%), consumption of fast food 2-5 times a week 22 (52%). In a total of 500 negative habits points, the situation in our country is as follows (64+57+57+67+52) 297 or (59%). Negative nutritional habits are significantly represented because T=4, and $p<0.01$.

Discussion

The study of lifestyle and its relationship to health is of increasing interest in clinical practice. (8) The impact of diet and lifestyle on future quality of life depends largely on how early in life appropriate interventions are initiated.

Dietary factors are estimated to be associated with a significant proportion of deaths from heart disease, stroke, and type 2 diabetes. These results should be taken into account in studies similar to ours to identify priorities, guide public health planning, and develop strategies to change dietary habits and improve health.(9)

For women, as the carriers of the future population, it is important to promote diet as a factor in health. Promotion of healthy longevity should begin at a young age and not be delayed until later in life, in order to improve the health and quality of life of both women and their offspring. Reproductive health and pregnancy outcomes are linked to nutrition to promote healthy longevity in young, middle-aged, and future older women, as well as for subsequent generations, based on the results of large human epidemiological studies. (10) The results of large human epidemiological studies emphasize the long-term effects of lifestyle on women's reproductive health and their later health and the health of their offspring, highlighting the importance of considering healthy diet and physical activity as a prerequisite for healthy longevity. (11) The risk of developing type 2 diabetes largely depends on food choices. This has been investigated in several studies, and we did so by assessing the consumption of unhealthy foods. We examined the intake of 12 foods and their association with the occurrence of type 2 diabetes (T2D). The relationship between whole grains, refined grains, vegetables, fruits, nuts, legumes, eggs, dairy products, fish, red meat, processed meat, and sugar-sweetened beverages on the risk of T2D was sought. It was found that 6 of the 12 food groups showed a significant

relationship with the risk of T2D, three of them reducing the risk with increased consumption (whole grains, fruit and dairy products), and three increasing the risk with increased consumption (red meat, processed meat and carbonated products. Optimal consumption of foods that reduce the risk of diabetes if reduced in the diet reduced the risk by up to 42%, and consumption of foods that increase the risk increased it by up to three times. was associated with a threefold risk of T2D, compared to non-consumption. Legumes and nuts are listed as "low" with a risk of T2D; refined grains, vegetables, fruit, eggs, dairy products and fish as "moderate"; and processed meat, red meat, whole grains and sugar-sweetened beverages as "high" risk. Among the food groups examined, the selection of specific optimal intakes can lead to a significant change in the risk of T2D. (12)

The consumption of certain foods is directly related to the occurrence of cardiovascular (CVD) and stroke. Despite increasing evidence for the potential of diets that lead to a reduced risk of these diseases, there is still no evidence for those that increase the risk. Optimal intake of whole grains, vegetables, fruits, nuts, legumes, dairy products, fish, red and processed meat, eggs and sweetened beverages shows a lower risk of CVD and stroke. (13)

In addition to diet, a lifestyle for quality of life throughout life is also considered to have the role of good and quality sleep, as well as sufficient physical activity with a body weight within normal limits. Our respondents had optimal sleep time in 81%, which is a good indicator. (14)

A large number of lifestyle factors have been identified that play an important role in the positive modification of medical and psychiatric diseases and their associated morbidity and mortality. These include eating a healthy diet, increasing physical activity, quitting smoking, avoiding alcohol and illicit substances. Additional lifestyle factors for a healthy life include a safe and peaceful environment, optimal sleep, stress-relieving and enjoyable activities, social connections/support, and healthy mental activities. Physicians from ancient times, through the Middle Ages to the early 20th century, recommended adopting healthy lifestyle factors, such as diet and exercise, to manage medical and psychiatric disorders, without really understanding their scientific basis.(15)

In recent decades, cultural globalization and urbanization have led to a "Western" orientation of lifestyles, characterized by increased consumption of foods high in refined carbohydrates, sugars, salt, saturated fats, proteins, and poor fruit and vegetable intake, and by an increase in sedentary behavior. This phenomenon has generated a "nutritional transition" in which obesity and diet-related chronic diseases pose new challenges for public health systems. In contrast to this global trend and in the context of healthy eating habits, a diet inspired by the principles of the Mediterranean diet (MD) is associated with multiple health benefits, due to its protective effects against a wide range of chronic and metabolic diseases, including obesity, diabetes mellitus, cardiovascular and neurodegenerative diseases, and cancer. (16,17,18) Consumption of fruits and vegetables and fermented dairy products contain prebiotics and probiotics. They are important for the proper functioning of the digestive system, where food is absorbed and essential vitamins and nutrients are produced and absorbed. (19)

Probiotics are well known as complementary therapeutics and health supplements for several diseases and disorders. Studies suggest that probiotic intervention has improved the health status of elite athletes, but the results are not consistent across studies. The beneficial effect of probiotic supplementation is deeply dependent on the species or strain, dose, duration, form, and physiology of the host. Our subjects consumed sufficient fruits and vegetables, which is due to family habits, as in our environment we consume a lot of tomatoes, peppers, rice, and beans.

Fish consumption is not traditional in our environment, as we do not have a sea, and rivers are polluted, while lakes are depleted, so we mainly eat canned and frozen fish. The scientific community is of the opinion that a balance should be made between the health benefits and risks associated with the consumption of crustaceans and nine species of farmed fish. The profiles of fatty acids (especially eicosapentaenoic (EPA) and docosahexaenoic (DHA) acids) and chemical contaminants (some polychlorinated biphenyls, pesticides and heavy metals) in the muscle tissues of fish are a parameter for the quality of the fish. The content of all fatty acids varies significantly between species. Fatty fish contain higher amounts of fish oils that are beneficial for the body. Lean fish, such as catfish, pike, etc., which have a relatively high percentage of the dominant n-3 fatty acids EPA and DHA, show lower amounts of these fatty acids due to their low lipid content. The concentrations of all contaminants in the muscle tissues of fish sold in markets are checked by the national food and veterinary agency. The contribution to health-based reference values and benefit-risk ratios indicate that the health benefits of fish consumption should be assessed after analysis of the fish.(20)

Diabetes mellitus (DM) is the leading global epidemic of the 21st century with over 422 million diabetics worldwide. The forecast for the prevalence of patients with diabetes mellitus by 2035 according to the World Health Organization (WHO) is thought to be 592 million patients. In the Republic of North Macedonia, it is estimated that 10% of the population has diagnosed diabetes while undiagnosed diabetes may lead to up to 20%. by 2035.(3)

All measures for the prevention of T2DM are of national interest for each country, in order to reduce the need for treatment of the disease itself and its complications. In addition to educating the population, some measures from the economic sector are also being promoted, such as higher taxes on foods containing processed refined sugars and fats. It remains to be thought about the prevention of this epidemic.

Conclusions

After analyzing our data, which constitute a small percentage of the total population, somewhere around 0.1% of that age, we can draw the following conclusions:

- Our population aged 20-25, regardless of gender, has the same habits in nutrition and physical activity.
- The modern lifestyle and the use of sedentary work increase the percentage of physical inactivity.
- Consuming healthy food is positively significant because it includes traditional and geographical characteristics of our country.
- Consuming unhealthy food is a trend everywhere in the world, including in our country, as an impact of modern challenges, especially sweetened juices that lead to changes in fat metabolism and non-alcoholic fatty liver disease.
- Preventive measures should be respected by multiple segments of society, adopted at the national level and applied in healthcare, economy and education.

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