Postmodern Openings
ISSN: 2068-0236 | e-ISSN: 2069-9387
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2021, Volume 12, Issue 4, pages: 184-196 | https://doi.org/10.18662/po/12.4/368

Considerations on Young People's Choices and Behaviors in the Postmodern Society: Fitness, Nutrition and Healthy Lifestyle

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Abstract: In postmodern society, many of the perceptions that people had about them, their lives, the values that define them and the strategies that they can use to achieve their ideals have changed. Specifically, today we can talk about new paradigms, such as health, lifestyle focused on personal well-being, obtained through fitness (physical activity, balanced diet and recovery) and wellness, respectively wellbeing that adds the spiritual component, in an holistic interdependence (Larson, 1999). An important role in the changes we are talking about has been played by the media, which promote living standards built on hedonistic principles, specific to the consumer society. The consequence is that more and more teenagers and young people want to look good and feel good, but only a small part of them reach the specialists, who are best able to provide individualized guidance, support, and programs to prevent any negative consequences of uninspired choices or poorly dosed enthusiasm The stakes of choice are high, because a healthy lifestyle, which should not be limited to body aesthetics, but also aims to develop the spiritual side, can support a more effective adaptation to the dynamics of changes in society (economic changes influencing developments in social life supported by political decisions). The last year, marked by a new challenge, the pandemic, has fully demonstrated the need to assume on a personal level a balanced and responsible lifestyle, which offers new values of quality of life, as well as complementing proactive management with that managed by specialists.

Keywords: *postmodern, lifestyle, fitness, nutrition.*

How to cite: Liuşnea, C.Ş. (2021). Considerations on Young People's Choices and Behaviors in the Postmodern Society: Fitness, Nutrition and Healthy Lifestyle. *Postmodern Openings, 12*(4), 184-196. https://doi.org/10.18662/po/12.4/368

1. Introduction

According to a 1997 study, 17% of the world's adult population was sedentary, and 60% of the world's total population did not exercise enough (Lee & Skerritt, 2001; Sizer & Whitney, 1997). Malnutrition and lack of physical activity were responsible for over 2 million deaths per year (Biddle et al., 1998, 2016; Blair et al., 1995). Moreover, data provided by the National Health and Nutrition Surveys (Barquera et al. 2013) and the World Health Organization, showed that 32.8% of Mexicans suffer from body weight problems (obesity and overweight), while in the US the percentage is 31.8%. Official data show that one in three people globally has an unhealthy diet that impacts their health (Global Nutrition Report, 2015). The percentage of the inactive population has increased greatly in recent years, although various programs have been adopted and there have been interventions even at the governmental level. Thus, at the level of 2018, the updated data showed that 70% of the population of some countries was physically inactive, due to the modernization of means of transport, technologies and urbanization.

In this context, we can see in parallel the increase in the percentage of those with a BMI> 25, so that in Europe, in 2019, the percentage was 53% of adults over 18 years (European Commission, 2021). By 2020, the number of children under 5 suffering from obesity had reached 39 million. According to estimates made by specialists, by 2025, over 50% of the world's population will suffer from obesity if effective measures are not taken (World Health Organization, 2018).

The determining factors for this situation were identified to be: genetics, family lifestyle, inactivity associated with irrational diet (Evans & Campbell, 1993; Popescu et al., 2015) and lack of rest, medical problems and the effects of drugs, economic and social problems, etc. In fact, sedentary lifestyle, stress, dietary imbalances, lack of sufficient rest, alcohol consumption, tobacco, etc. are the main risks (Organización Panamericana De La Salud, 2007): cardiovascular diseases (coronary heart disease, stroke and hypertension), metabolic diseases (type II diabetes and obesity), musculoskeletal diseases (osteoporosis), cancer, functional diseases, depression, etc. In addition, weight gain triggers dissatisfaction with self-image (Strauman et al., 1991), leading to distrust, frustration, nervousness, in women bulimia and anorexia and even depression.

Adolescents and young people are more affected because they also have a lifestyle dependent on new technologies (phone, Smartphone,

android – Wacks & Weinstein, 2021), which prevents them from getting enough sleep to have more time to perform physical activities, essential for energy balance and the weight control (World Health Organization, 2009). Used for games and socializing for a long time, they can be addictive, with a higher degree of risk to physical and mental health (Elhai et al., 2017).

On the other hand, under the pressure of the consumer society, studies show that there is a great dissatisfaction that young people feel towards their own body image of young people (Heider et al., 2018) and that we can talk about internalizing the ideal of appearance, physical BIP (Cooper & Taylor, 1988).

The WHO plan for the period 2018-2030 emphasized the need for regular physical activity, as a means of preventing illness and death. The objective of this plan is to reduce to 15% the percentage of the inactive population, worldwide, by 2030 (World Health Organization, 2018).

At the same time, interventions are planned in the field of nutrition, with a positive impact on human health. As early as the second half of the last century, there was a strong challenge for nutritionists, the consumer society imposing a certain dynamic of consumption, reflected in the so-called "McDonald's world" in the fast food model, with an apparent ignorance of quality products and especially the health consequences (Ritzer, 1997). In parallel, human culture has known a new dimension - that of popularizing the practice of sports, promoted by the press and TV programs, which promised to achieve goals quickly and by means available to all. In addition, we can speak of a renunciation of the traditional elements specific to local cultures.

An example is the consumerist explosion, in all Western countries, of body-building (bodybuilding), in the 70s of the twentieth century, an important role being played by the Mister Olympia contest, highly promoted by the participation of Arnold Schwarzenegger, who its aesthetic, will strongly influence the collective imagination. The body gradually became a temple of daily worship and cultivation (Sassatelli, 2000), with passion, because "the value that most characterizes sport is" the joy of effort"(Coubertin et al., 2000).

These evolutions have marked the postmodern society, in which the attention is focused on the man, who manifests himself socially as a person, who is accepted, first of all, if he physically corresponds to contemporary aesthetic standards (Cash, 1990). They aim at aspects such as a supple, harmoniously developed, toned body, which emanates dynamism and an optimal state of health. The *sporty man* model is becoming more and more important (Bausinger, 2006).

The society, this field of relationships, connections, exchanges, actions and conventions between people, as defined by Pierre Bourdieu (1992), which is achieved through fluid and dynamic processes, constituting social structures and cultural forms, requires involvement, effort and the desire to succeed. At the same time, these demands force young people to face challenges and risks, involving a very busy schedule, inadequate nutrition and a high level of stress.

Currently, in the conditions of the coronavirus pandemic, the issue of healthy eating, associated with physical activity, which ensures an optimal state of health of young people, as well as a high level of quality of life is gaining new value. Thus, the restrictions imposed by the authorities, in an attempt to control the effects of the pandemic, have restricted the possibilities of ensuring a balanced lifestyle, even for those who before this period had opted and built such a style.

On the other hand, let's not forget that studies have clearly shown that in the period before 2020, a large part of young people in the world, and those in Romania and the Republic of Moldova are no exception, had unhealthy food choices (Popescu et al., 2015) and a largely sedentary lifestyle.

2. Healthy lifestyle: Young people's specific choices and behaviors

In order to analyze the food choices of young people, we must also consider a number of factors such as: habits formed in the family, based on beliefs, beliefs, principles, mentality, which determines a certain perspective / image on life as a whole.

These choices are determined by gender, age, income / financial resources, specialization chosen for studies or job, lifestyle during the years of study and after. Depending on these, the criteria and factors that determine a diet can be determined, which is based on healthy or unhealthy products, fast food type, irrational with too small amounts of fiber and nutrients, unbalanced in terms of calories (Popescu et al., 2015).

A great influence in this sense is undoubtedly played by education. Experts believe that lifestyle, which involves social experiences, traditions, habits and behavior (Fernández, 1996), also includes satisfactory nutritional practices adopted early in life, which are maintained for as long as possible, resulting in reduced morbidity and mortality (Gliksman et al., 1993). Bad habits acquired in childhood and adolescence can have negative repercussions on the health of the adult (Kelder et al., 1994). We are talking about deficiencies - iron (in people who consume little meat), poor diet in

milk protein, eggs and meat, high energy intake obtained from sweets and fats specific to fast food, soft drinks (especially Coca -Cola) and sweets with a high sugar intake, preparations with food additives (nitrites / sodium nitrates, which can even lead to nitrosamines with the role of carcinogenesis), excess salt, polycyclic aromatic hydrocarbons (smoked, also with the role of in carcinogenesis). To these is added the habit of not having breakfast.

In fact, food also plays a social, identity role, specialists considering that the psychological dimension can explain the attitude such as attraction, disgust, acceptance or rejection of food (Raoult-Wack, 2007). Some experts point out that the adoption of a healthy lifestyle can lead to risk prevention and can become a protective factor, in which an important role in the well-being of the person belongs to gastronomy, the way of eating has an influence on the proper functioning of the body, in an holistic interdependence (Bourne, 2010; Hettler, 1984; Larson, 1999). These roles are found in ethnic cuisine and national gastronomy (Torres et al., 2004), but, in precarious economic and financial conditions, we are witnessing an increasingly insistent taxation of products from the activity of major concerns, distributed through store, which tempts the consumer, through offers, promotions and facilities with a greater impact on young people's preferences, as well as their eating behavior (friendly offers, for example: food and beverages for intolerances, low in sugar, salt, fat dietary supplements, fortifying or high in fiber). However, we cannot make generalizations, because, at the same time, aware of the risks, some young people are looking for healthy, organic foods without artificial flavors (Acosta & Gómez, 2003).

In the same context, although the opinions of specialists differ on the meaning of terms such as fitness, fitness, wellbeing, wellness that they consider directly or tangentially related to health (Najman, 2001), all agree that a healthy lifestyle involves a healthy diet against the background of an increase in the level of physical activity, and it can be formed early through education, involving cultivated behaviors. In this regard, Williams et al. (1998) showed that changing and maintaining a health-oriented behavior needs an autonomous motivation.

The new culture of body, health, and well-being are well integrated into the economic, social, and political structure, reflected in the American concept of welfare society and the European concept of sport for all, with sport increasingly becoming a social space (Porro, 2013).

At the same time, the influence of aggressive marketing, the imposition of the American style, have had as a consequence the change of

some norms, habits, as well as the abandonment of the principles of nutrition by children and young people, with negative effect on their food choices and behaviors. Let us remember that nutrition was seen, in the last century, as a component of public health, being, at the same time, a means of preventing disease (Closas, 1995). Later, the science of nutrition emerged, based on the studies of Antoine Lavoisier[1], François Magendie[2] and Justus Von Liebig[3], who had shown that food contains three elements: carbohydrates, lipids and carbohydrates[4]. This science has attracted the attention not only of nutritionists, but also of politicians and, finally, of the general public (Raoult-Wack, 2007). Thus, in an attempt to limit the negative consequences of bad choices, which in the United States alone led to about 184 million overweight people (of whom 40% are children), a number of decisions were made, even at the governmental level, of which we mention the creation, in 1989, of a separate structure within the French Ministry of Culture, which aimed to combat fast food culture (Voinea et al., 2011).

3. The impact of media marketing policies on young people and the responsibility of specialists

However, marketing policies create pressure, being sometimes aggressive, the eating behavior of young people being influenced, so they often adopt attitudes based on reactions to stimuli such as appearance, price of a food, sometimes to the detriment of its quality or quantity - defending the risk of overconsumption, as is widely the case in the US. (Andrade, 2017; Yaroch et al., 2000)

In general, people are taught, especially through the media, to want to be accepted by others, to be recognized as full members of society, but now they insist only on the aesthetic image (the body being the object and subject of culture), build through a lifestyle that values fitness - exercise, recovery and healthy eating (Malm et al., 2019; Williams et al., 1998) - in fact reflecting the self-image of the young person, representing a fundamental experience for the consumer society. It values toning and strengthening the muscles of the body, for which a cult has practically developed, the stake being the outer beauty, complemented by the young person's work capacity,

[1] Antoine Lavoisier, in the 18th century, discovered the sum of the chemical processes that make up metabolism

[2] François Magendie, in 1816, determines the importance of nitrogen - what is a component of protein.

[3] Justus Von Liebig, in 1880 - who studied protein balance, attributing to protein the role of "muscle food".

[4] Vitamins and mineral salts will be added to this list later.

on human-affective relations and social acceptance, everything being viewed from a hedonistic perspective (Bourne 2010; Larson, 1999). Thus, we observe changes in mentality, the human person trying through consumption to satisfy his need for good (we are talking about a new social identity) or to resemble the stereotypes accepted by society. As a result, young people form a distorted self-image (Cash & Brown, 1987), feeling under social pressure, so they begin to feel frustrated, bewildered, unable to overcome negative thoughts, often ending up depressed. The explanation is that, unfortunately, other qualities such as spiritual are ignored, being more important how they present themselves, than how they are, as observed by Ana Maria López Muñoz (2014). Thus, the consequence may be the birth of a paradox, believes Michael Pollan (2008), namely, a risky game between over nutrition and malnutrition, between exercise and excessive exercise, between healthy and unhealthy practices that interact with each other (Carrasco, 2004).

In fact, it is interesting that the same media that encourage consumption, promote the model of supple silhouettes (Raoult-Wack, 2007), promote canons of beauty (Rodrígues Gonzalez, 2016), so that young people are tempted to practice physical activities, but do not understand that their role is not just to burn extra calories and that this does not happen overnight.

The beneficial part of providing models is that young people are somehow motivated to practice physical activities (fitness is fashionable, becoming widespread in social habits), which associated with diet, can positively influence health (Tamayo 2008), by reducing the incidence of the risk of chronic and non-communicable diseases, with an obvious impact on quality of life (Pacione, 1984; Rogerson, 1995). We find another consequence, the increasing emphasis on a proactive management, which aims at the personal involvement of young people in their own development. But we believe that it should not replace the management of specialists, psychologists, nutritionists and last but not least of sports specialists. (Marlett et al., 2002; WHO, 2005). On the other hand, studies show that the language used by specialists is very important, which is the key in terms of communication in the field. In Australia, for example, there are no fewer than 15 universities that have included diet programs accredited by the Dietitians Association of Australia (DAA).

4. Conclusions

In the new economic and social context and the need to support young people in adopting a healthy lifestyle, interventions must aim we believe a correct perspective on the influence of proper nutrition, corroborated with the habit of physical activity and use of means of recovery adequate. A proper diet is established by taking into account, in addition to general dietary parameters and cultural or specific habits, real physical activity, the stress imminent to frequent aggressions of daily life, possible health disorders.

Adapted and balanced nutrition involves covering energy needs at the same time as nutritional needs to maintain their own structures, separation of wear, maintenance of physiological processes of growth and development. This involves the inclusion of all nutrients within limits considered normal for each, but also the observance of certain proportions between them. The presence or absence of an essential nutrient can affect the availability, absorption, metabolism or needs of the body for other nutrients. Recognition of the interrelationships between nutrients is the scientific support for the application of the principle of variety of food achieved through the most complex diets.

We already know that, over time, the stressful, inactive, unbalanced lifestyle leads to the risk of developing diseases specific to the adult population, such as gradual decreased of muscle mass (sarcopenia) and increased adipose tissue (Visser et al., 2003), being severely affected thus, physical condition.

As a result, along with proper nutritional nutrition, in maintaining health, a major role is played by moderate but regular physical activity (Jacoby et al., 2003). It is demonstrated that free and creative work, both physical and intellectual, produces great human satisfaction, in addition to its social role. It is also an important source of health and an essential condition for multilateral development.

Young people who regularly exercise and follow a healthy diet will be able to have a positive image of their body (body imagination perception BIP).

So an adequate diet in the context of an active life can determine positive effects on a person's development, both physically and mentally, being important coordinates in what specialists call a healthy lifestyle.

References

Acosta, M. V., & Gómez, G. (2003). Insatisfacción corporal y seguimeinto de dieta. Una comparación transcultural entre adolescentes de España y México [Body dissatisfaction and diet follow-up. A cross-cultural comparison between adolescents from Spain and Mexico]. *Revista Internacional de Psicología Clínica y de la Salud/International Journal of Clinical and Health Psychology*, *3*(1), 9-21. https://www.redalyc.org/pdf/337/33730101.pdf

Andrade, D. L. (2017). *El fitness, como estilo de vida* [Fitness, as a lifestyle]. Perdoma Suludable.

Barquera, S., Campos-Nonato, I., Hernández-Barrera, L., Pedroza-Tobías, A., & Rivera-Dommarco J. (2013). Prevalencia de obesidad en adultos mexicanos [Prevalence of obesity in Mexican adults]. *Salud Publica de Mexico*, *55*(2), 151-160. https://saludpublica.mx/index.php/spm/article/view/5111/4937

Bausinger, H. (2006). *Sportkultur: Sport in der heutigen Zeit* [Sports culture: Sports today]. Attempto Verlang.

Biddle, S. J. H., Bennie J. A., Bauman A. E., Chau J. Y., Dunstan D., Owen N., Stamatakis E., & van Uffelen J. G. (2016). Too much sitting and all-cause mortality: is there a causal link?, *BMC Public Health*, 16: 635. https://doi.org/10.1186/s12889-016-3307-3

Biddle, S., Sallis, J. F., & Cavill, N. (Eds). (1998). *Young and Active? Young People and Health - Enhancing Physical Activity - Evidence and Implications.* Health Education Authority.

Blair, S. N., Kohl, H. W., Barlow, C. E., Paffenbarger, R. S., Gibbons, L. W., & Macera, C. A. (1995). Changes in physical fitness and all-cause mortality: a prospective study of healthy and unhealthy men. *JAMA The Journal of the American Medical Association*, *273*(14), 1093-1098. http://dx.doi.org/10.1001/jama.1995.03520380029031

Bourdieu, P. (1992). Thinking about limits. *Theory, Culture & Society*, *9*, 37-49. https://doi.org/10.1177/026327692009001003

Bourne, P. A. (2010). A Conceptual Framework of Wellbeing in Some Western Nations (A Review Article) *Current Research Journal of Social Sciences*, *2*(1), 15-23. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.457.7795&rep=rep1&type=pdf

Carrasco, A. M. (2004). Consumo de alcohol y estilos de vida: una tipología de los adolescentes españoles [Alcohol consumption and lifestyles: a typology of Spanish adolescents]. *Revista de psicología social, 19*(1), 51-79. https://doi.org/10.1174/021347404322726553

Cash, T. F. (1990). The psychology of physical appearance: Aesthetics, attributes, and images. In T. F Cash & T. Pruzinsky (Eds.*), Body Images: Development, Deviance and Changes* (pp. 51-79). Guilford Press.

Cash, T. F., & Brown, T. A. (1987). Body image in anorexia nervosa and bulimia nervosa. *Behavior Modification*, *11*(4), 487-521. https://doi.org/10.1177%2F01454455870114005

Closas, G. R. (1995). Historia de la Nutrición en Salud Pública [History of Nutrition in Public Health]. In L. S. Majem & J. A. Bartrina (Eds.), Nutrición y Salud Pública. Métodos, Bases científicas y aplicaciones [Nutrition and Public Health. Methods, scientific bases and applications.]. (pp. 48-65). Editorial Masson, S.A.

Cooper, P. J., & Taylor, M. J. (1988). Body-image disturbance in bulimia-nervosa. *British Journal of Psychiatry*, *153(*Suppl 2), 32-36. http://doi.org/10.1192/s0007125000298966

Coubertin, P., Muller, H., & Skinner, W. H. (2000). *Pierre De Coubertin 1863-1937: Olympism. Selected writings*. International Olympic Committe.

Elhai, J. D., Dvorak, R. D., Levine, J. C., & Hall, B. J. (2017). Problematic Smartphone use: A conceptual overview and systematic review of relations with anxiety and depression psychopathology. *Journal of Affective Disorders*, *207*, 251-259. https://doi.org/10.1016/j.jad.2016.08.030

European Commision. (2021). Overweight and obesity – BMI Statistics, EUROSTAT, Statistics Explained. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Overweight_and_obesity_-_BMI_statistics

Evans, W. J., & Campbell, W.W. (1993). Sarcopenia and age-related changes in body composition and functional capacity. *The Journal of nutrition*, *123*(Suppl 2), 465-468. https://doi.org/10.1093/jn/123.suppl_2.465

Fernández, J. (1996). Evaluación ecopsicológica de los estilos de vida. In G. Buela, V. Caballo & C. Sierra (Eds.), *Manual de evaluación en psicología clínica y de la salud* (pp. 1071-1090). Siglo Veintiuno.

Gliksman, L., McKenzie, D., Single, E., Douglas, R., Brunet, S., & Moffatt, K. (1993). The role of alcohol providers in prevention: an evaluation of server intervention programme. *Addicton. Society for the study of Addiction*, *88*(9), 1195-1203. https://doi.org/10.1111/j.1360-0443.1993.tb02142.x

Global Nutrition Report. (2015). *Actions and accountability to advance nutrion and sustenable development*. International Food Policy Research Institute (IFPRI) (https://globalnutritionreport.org/reports/2015-global-nutrition-report/

Heider, N., Spruyt, A., & Houwer, J. (2018). Body Dissatisdaction Revisited: on the Importance of Implicit Beliefs about Actual and Ideal Body Image, *Psychologica Belgica*, *58*(1), 158-173. http://doi.org/10.5334/pb.362

Hettler, B. (1984). Wellness: encouraging a lifetime pursuit of excellence. *Health Values*, *8*(4), 13-17. https://pubmed.ncbi.nlm.nih.gov/10267293/

Jacoby, E., Bull, F., & Neiman, A. (2003). Cambios acelerados del estilo de vida obligan a fomentar la actividad fisica como prioridad en la Región de las Américas [Accelerated changes in lifestyle make it necessary to promote physical activity as a priority in the Region of the Americas.]. *Revista Panamericana de Salud Pública*, *14*, 223-225. http://dx.doi.org/10.1590/S1020-49892003000900001

Kelder, S. H., Perry, C .L., Klepp, K-I., & Lyle, L. L., (1994). Longitudinal Tacking of Adolescent smoking, Physical Activity and Food Choice Behaviors, *American Journal of Public Health*, *84* (7), 1121-1126. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1614729/pdf/amjph00458-0067.pdf

Larson, J. S. (1999). The conceptualization of health. *Medical Care Research and Review*, *56*(2), 123-136. https://doi.org/10.1177%2F107755879905600201

Lee, I. M., & Skerrett, P. J. (2001). Physical activity and all-cause mortality: what is the dose-response relation?. *Medicine and Science in Sports and exercise*, *33*(6 Suppl), 459-471. https://doi.org/10.1097/00005768-200106001-00016

Malm, C., Jakobsson, J., & Isaksson, A. (2019). Physical Activity and Sports-Real Health Benefits: A Review with Insight into the Public Health of Sweden. *Sports*, *7*(5), 127. https://doi.org/10.3390/sports7050127

Marlett, J., McBurney, M., Slavin, J., & American Dietetic Association. (2002). Position of the American Dietetic Association: health implications of dietary fiber. *American Dietetic Association*, *102*(7), 993-1000. https://doi.org/10.1016/s0002-8223(02)90228-2

Muñoz López, A. M. (2014). *La imagen corporal en la sociedad del siglo XXI* [Body image in the 21st century society]. Universitat Internacional de Catalunya. http://repositori.uic.es/bitstream/handle/20.500.12328/868/TFG_Ana%20María%20Muñoz%20López_2014.pdf?sequence=7&isAllowed=y

Najman, J. M. (2001). A general model of the social origins of health and wellbeing. In R. Eckersley, J. Dixon & B. Douglas (Eds.), *The social origins of health and well-being* (pp. 73-82). Cambridge University Press.

Organización Panamericana De La Salud. (2007). Salud en las Américas [Health in the Americas]. *Publicación Científica y Técnica*, *622*. https://www.paho.org/salud-en-las-americas-2012/dmdocuments/salud-americas-2007-vol-1.pdf

Pacione, M. (1984). Evaluating the quality of the residential environment in a high-rise public housing development, *Applied Geography*, *4*, 59-70. https://doi.org/10.1016/0143-6228(84)90005-5

Pollan, M. (2008). În apărarea mâncării. Manifestul unui gourmand, [In Defense of Food: An Eater's Manifesto]. House of Guides Publishing House.

Popescu, D. V., Voinea, L., & Negrea, M. T. (2015). Nutritional imbalance - dominant consumption behaviour of young people from Romania. *Amfiteatru Economic*, *17* (Special No. 9), 872-886. https://www.amfiteatrueconomic.ro/temp/Article_2470.pdf

Porro, N. (2013). *Movimenti colletivi e culture sociale dello sport europeo. Le stagioni della sportivizzazione* [Collective movements and social cultures of European sport. The seasons of sporting]. Gruppo Editoriale S.R.L..

Raoult-Wack, A. L. (2007). *Hrana - Spune-mi ce mănânci ca să-ţi spun cine eşti* [Food - Tell Me What You Eat, To Tell You Who You Are]. Univers Publishing House.

Ritzer, G. (1997). *Il mondo alla McDonald* [The world at McDonald's]. Il Mulino.

Rodríguez Gonzalez, M. (2016). Impacto de los medios de comunicación en la cesta de la compra [Impact of the media on the shopping cart]. *Revista Espanola de Comunicacion en Salud.*, (Supl. 1), 69-83. http://dx.doi.org/10.20318/recs.2016.3124

Rogerson, J. R. (1995). Environmental and health-related quality of life: Conceptual and methodological similarities. *Social Science & Medicine*, *41*(10), 1373-1382. https://doi.org/10.1016/0277-9536(95)00122-N

Sassatelli, R. (2000). *Anatomia della palestra. Cultura commerciale del corpo* [Anatomy of the gym. Commercial culture of the body]. Il Mulino.

Sizer, F. S., & Whitney, E. N. (1997). *Nutrition: Concepts and controversies* (7th ed.) West/Wadsworth.

Strauman, T. J., Vookles, J., Berenstein, V., Chaiken, S., & Higgins, E. T. (1991). Self-discrepancies and vulnerability to body dissatisfaction and disordered eating. *Journal of Personality and Social Psychology*, *61*, (6), 946-956. https://doi.org/10.1037/0022-3514.61.6.946

Tamayo, G. (2008). El mercadeo en el Fitness [Marketing in Fitness]. Universidad de Antioquia.http://viref.udea.edu.co/contenido/pdf/143-mercadeo.pdf

Torres, G., Zito Fontán, L. M., & Santoni, M. (2004). El alimento, la cocina étnica, la gastronomía nacional. Elemento patrimonial y un referente de la identidad cultural [The food, the ethnic cuisine, the national gastronomy. Heritage element and a benchmark of cultural identity]. *Consejo Nacional de Investigaciones Científicas y Técnicas Buenos Aires*, *Argentina*, 55-66. https://www.redalyc.org/pdf/148/14802603.pdf

Visser, M., Pahor, M., Tylavsky, F., Kritchevsky, S. B., Cauley, J. A., Newman, A. B., Blunt, B. A., & Harris, T. B. (2003). One- and two-year change in body composition as measured by DXA in a population based cohort of older men and women. *Journal of applied physiology*, *94*(6), 2368-2374. https://doi.org/10.1152/japplphysiol.00124.2002

Voinea, L., Popescu, D. V., & Negrea, T. M. (2011). Paradoxes in the diet of modern consumer at the confluence between food science and food industry. *Ovidius University Annals, Economic Sciences, Serie, XI*(1), 2321-2325. https://www.researchgate.net/profile/Lelia-Voinea/publication/227466239_Paradoxes_in_the_Diet_of_Modern_Consumer_at_the_Confluence_between_Food_Science_and_Food_Industry/links/5b3602794585150d23e0e4f2/Paradoxes-in-the-Diet-of-Modern-Consumer-at-the-Confluence-between-Food-Science-and-Food-Industry.pdf

Wacks, Y., & Weinstein, A. M. (2021). Excessive Smartphone use is Associated with Health Problems in Adolescents and Young Adults, *Fontiers Psychiatry*, *12*, 1-7. https://doi.org/10.3389/fpsyt.2021.669042

Williams, G. C., Freedman, Z. R., & Deci, E .L. (1998). Supporting autonomy to motivate patiens with diabetes glucose control. *Diabetes Care*, *21*(10), 1644-1651. http://doi.org/10.2337/diacare.21.10.1644

World Health Organisation. (2005). Ecosystems and human well-being. Health synthesis. A Report of the Millennium Ecosystem Assessment, WHO Press, Geneva, 1-64. https://apps.who.int/iris/bitstream/handle/10665/43354/9241563095.pdf?sequence=1&isAllowed=y

World Health Organization. (2009). *Global health risks: mortality and burden of disease attributable to selected major risks.* https://www.who.int/healthinfo/global_burden_disease/GlobalHealthRisks_report_full.pdf

World Health Organization. (2018). *Global action plan on physical activity 2018-2030: more active people for a healthier world.* https://apps.who.int/iris/bitstream/handle/10665/272722/9789241514187-eng.pdf

Yaroch, A. L., Resnicow, K., Petty A. D., & Khan L. K., (2000). Validity and reability of a modified dietary fat index in low-income, overweight, African American adolescent girls. *Journal of the American Dietetic Association*, *100*(12), 1525-1529. https://doi.org/10.1016/S0002-8223(00)00422-3