Escuela de Ciencias del Movimiento Humano y Calidad de Vida
Universidad Nacional, Costa Rica
e-ISSN: 1659-097X
Vol. 22(2), julio-diciembre, 2025: e19881
revistamhsalud@una.ac.cr

MHSalud
Revista en Ciencias del Movimiento Humano y Salud

Doi: https://doi.org/10.15359/mhs.22-2.19881

Relationship between diet, social media use and self-perception of diet, physical activity and health in Mexican adolescents

Relación entre alimentación, el uso de redes sociales y la percepción de alimentación, actividad física y salud en adolescentes mexicanos

Relação entre alimentação, uso de redes sociais e percepção de nutrição, atividade física e saúde em adolescentes mexicanos

Teresa Gutiérrez-Higuera[1]; Sylvia Adriana Estrada Díaz[2]; Martín Ochoa-Ávalos[3]

Recibido 26-04-2024 - Aceptado 17-02-2025

1 Universidad Autónoma de Nuevo León, Facultad de Organización Deportiva, San Nicolás de los Garza, N.L., México. teresa.gh@outlook.com, https://orcid.org/0000-0001-6819-0582
2 Universidad Autónoma de Occidente, Centro de Investigaciones en Ciencias de la Cultura Física y Salud. Culiacán, Sin., México. sylvia.estrada@gmail.com, https://orcid.org/0000-0001-5024-7341
3 Universidad Autónoma de Nuevo León, Facultad de Organización Deportiva, San Nicolás de los Garza, N.L., México. moa13.mb13@gmail.com, https://orcid.org/0000-0001-7884-8544

ABSTRACT

Introduction: Improving diet habits and physical activity has been one of the main challenges in the last years. One third of underage individuals does not have a healthy diet, whereas use of social media by adolescents is at an all-time high, and this appears to determine the way adolescents eat and perceive their health. **Objective:** To analyze the relationship between the recommended food for daily consumption (RFD) and the not recommended food for daily consumption (NRFD), with the use of social media, and self-perception of diet, physical activity and health of Mexican adolescents, by sex and social setting. **Methodology:** A descriptive, transversal and quantitative study was performed in a group of 328 Mexican adolescents (14.47 ± 0.53 years), 56.1% lived in an urban setting and 59.80% of them were girls. The frequency of RFD and NRFD consumption, the use of different social media and the self-perception of diet, physical activity and health condition of the adolescents were evaluated. **Results:** Adolescents from rural setting consume more NRFD. Boys consume foods from animal origin more frequently than girls. Girls consume more frequently foods with high amounts of sugar. Girls use more social media. Boys have a better perception of their habits. The use of social media was positively correlated with the frequency in the consumption of NRFD. **Conclusions:** Adolescents' diet was associated with sex and setting. Not relationship was found between the use of social media and the perception adolescents have of their diet, level of physical activity or health, but there was a relationship with their choice of food, therefore, when they are more exposed to them, the higher is the consumption of NRFD.

Keywords: food intake, physical exercise, scholars, social networks, social setting

RESUMEN

Introducción: Mejorar la alimentación y la actividad física ha sido de los principales retos en los últimos años. Un tercio de las personas menores de edad no tiene una alimentación saludable, mientras que, el uso de redes sociales, por parte de los adolescentes se encuentra en su punto más alto, situación que parece determinar su alimentación y su percepción de salud. **Objetivo:** Analizar la relación entre el consumo de alimentos recomendados (ARD) y no recomendados para consumo diario (ANRD), con el uso de redes sociales, la percepción de alimentación, actividad física y salud de los adolescentes mexicanos, por sexo y por entorno social. **Metodología:** Se realizó un estudio descriptivo de corte transversal y enfoque cuantitativo en 328 adolescentes mexicanos (14.47 ± 0.53 años). El 56.1 % vive en entorno urbano y 59.8 % son mujeres. Se evaluó la frecuencia de consumo de ARD y ANRD, del uso de distintas redes sociales y la autopercepción de alimentación, actividad física y salud. **Resultados:** Los adolescentes del entorno rural consumen más ANRD. Los hombres consumen más alimentos de origen animal. Las mujeres consumen con mayor frecuencia alimentos ricos en azúcar añadida. Las jóvenes utilizan más redes sociales. Los adolescentes varones tienen mejor percepción de sus hábitos. El uso de redes sociales se correlacionó positivamente con la frecuencia en el consumo de ANRD. **Conclusiones:** La alimentación de la población adolescente se asoció al sexo y al entorno. No se encontró relación entre el uso de redes sociales y la percepción de la alimentación, el nivel de actividad física y la salud, pero sí con la elección de los alimentos, por lo que, a mayor exposición a ellas, mayor es el consumo de ANRD.

Palabras clave: dieta, ejercicio físico, entorno social, escolares, redes sociales

RESUMO

Introdução: Melhorar a alimentação e a atividade física tem sido um dos principais desafios nos últimos anos. Um terço dos menores não segue uma alimentação saudável, enquanto o uso de redes sociais entre adolescentes está em seu ponto mais alto, aparentemente influenciando sua alimentação e percepção de saúde. **Objetivo:** Analisar a relação entre o consumo de alimentos recomendados para consumo diário (ARD) e não recomendados para consumo diário (ANRD), com o uso de redes sociais, autopercepção de alimentação, atividade física e saúde de adolescentes mexicanos, por sexo e ambiente social. **Metodologia:** Foi realizado um estudo descritivo transversal com abordagem quantitativa em 328 adolescentes mexicanos (14,47 ± 0,53 anos). Destes, 56,1% vivem em ambiente urbano e 59,8% são meninas. Avaliou-se a frequência de consumo de ARD e ANRD, o uso de diferentes redes sociais e a autopercepção de alimentação, atividade física e saúde. **Resultados:** Adolescentes do ambiente rural consumiram mais ANRD. Os meninos consumiram mais alimentos de origem animal, enquanto as meninas consumiram com mais frequência alimentos ricos em açúcar adicionado. As meninas usaram mais redes sociais, e os meninos tiveram melhor percepção de seus hábitos. O uso de redes sociais correlacionou-se positivamente com a frequência de consumo de ANRD. **Conclusões:** A alimentação dos adolescentes associou-se ao sexo e ambiente. Não foi encontrada

relação entre o uso de redes sociais e autopercepção de alimentação, nível de atividade física ou saúde, mas houve relação com a escolha de alimentos: maior exposição às redes sociais associou-se a maior consumo de ANRD.

Palavras-chave: ambiente social, dieta, escolares, exercício físico, redes sociais

Introduction

Improving eating habits and physical activity has been one of the major public health challenges in recent years due to their substantial impact on human health. Poor dietary patterns and physical inactivity are associated with obesity, cardiovascular diseases, diabetes, cancer, and an increased risk of premature mortality (World Health Organization [WHO], 2021; 2023). A healthy diet provides the essential energy and nutrients required to prevent malnutrition and reduce the risk of chronic diseases such as obesity, diabetes, hypertension, and cancer, among others. Moreover, healthy eating behaviors should be established early in life and maintained throughout the lifespan. Even though the ideal diet depends on the characteristics of each person, It should be based in the daily consumption of fruits, vegetables, whole grains and limit to the maximum processed food, high in calories, sugars, unhealthy fat and sodium (Del Razo-Olvera, 2020; WHO, 2018).

Worldwide, underage individuals are affected by either food shortages or excess of food, and it is estimated that one third of them does not have a healthy diet (United Nations Children's Fund, 2019; WHO, 2021). Mexican adolescents report a high consumption of sugary beverages, candies and snacks, which are not recommended for daily consumption (NRFD), as well as a low consumption of recommended food for daily consumption (RFD) such as fruits, vegetables, egg, legumes and not processed meat. Boys consume more not processed meat and egg than girls. According to literature, adolescents living in a rural setting in México tend to consume more natural water and legumes, whereas adolescents in an urban setting consume more fast food, processed and not processed meat, dairy and vegetables (Shamah-Levy *et al.*, 2020).

Another growing problem among adolescents is the use of social media. It is at an all-time high, being girls those who use them more frequently (Golpe-Ferreiro *et al.*, 2017; Meltwater, 2024; Moreno-Muciño *et al*, 2021). According to recent research, WhatsApp, Instagram, and TikTok are currently among the most widely used social media platforms among adolescents worldwide. (Meltwater, 2024; Moreira *et al.*, 2021; Sánchez-Romero & López-Berlanga, 2020).

In recent years, the influence of social media in behavior related to diet and self-image has been studied. It was found that exposure using this media to content related to images could determine in a negative way the choice of food and satisfaction with body image (Rounsefell *et al.*, 2020). Regarding adolescents, social media appears to have either a positive and a negative effect in the way they eat and perceive their health (Chung *et al*., 2021; Kucharczuk *et al.*, 2022; Rosales & Gutiérrez-Hernández, 2022).

The highest the number of social media accounts and time exposure to them, it appears to be a higher tendency to an unhealthy diet behavior and worse perception of health in girls as well as in boys (Wilksch *et al.*, 2020). Thus, the use of social media has been associated with physical activity behaviors; however, the evidence remains inconclusive. Some studies have reported that social media use is positively associated with higher levels of physical activity, whereas others have found that greater exposure to social media is linked to lower levels of physical activity among adolescents. (Moral-García *et al.*, 2023; Moreno-Muciño *et al.*, 2021; Shimoga *et al*., 2019).

In spite of the previously presented information, up to the moment this study is being developed, a reference that evaluates in a specific way the association between food consumption considered healthy and not healthy with the use of social media has not been identified, as well as the self-perception adolescents have of their diet, their physical activity and health status, therefore it is important to investigate not only the adolescents' self-perception of their body image, but also how they consider their diet, their practice of physical activity and health status, and if these considerations could be related to the diet and the frequency of social media exposure, as well as knowing if there are differences by sex and social settings.

Therefore, the aim of this study was to analyze the relationship between the consumption of RFD and NRFD with the use of social media, and self-perception of diet, physical activity and health of Mexican adolescents, by sex and social setting.

Methodology

Design and Sample

A transversal, with correlated effect, descriptive study was made in a non-probabilistic sample of 328 adolescents with an average age of 14.47 ± 0.53 years. Girls were the 59.8%, 43.9% (*n* = 144) lived in a rural setting whereas 56.1% (*n* = 184) in an urban setting of Mexico.

Procedure and Ethical Considerations

Once approval from the Ethics in Research Committee of the Facultad de Organización Deportiva was obtained (CEIFOD 062022 001), the directors from two secondary education institutions were contacted: one located in a rural setting and another one in an urban setting from the north of Mexico. The objective of the study, procedures, benefits and risks of participating were presented, as well as the confidentiality of the information used every moment. Informed consent and assent were obtained. Questionnaire answering took about ten minutes. Research followed recommendations of the regulations of the Law of General Health in the subject of Health Research, for studies performed in underage and without risk individuals (Diario Oficial de la Federación, 2014).

Instruments

To collect data, questionnaires were previously digitalized in the platform QuestionPro, and they were answered in a digital way at the computers lab of the institutions or at the corresponding classroom, with the presence of one of the researchers.

Diet. To know about the food intake, a short food consumption frequency questionnaire was implemented, which allows to know the number of days in the last week that adolescents consumed different groups of food, such groups were classified in RFD and NRFD. It was adapted from the Food Frequency Questionnaire for Mexican adolescents and adults (Denova-Gutiérrez *et al.*, 2016). The options of answers were in a Likert scale: 1) Never; 2) 1-2 days a week; 3) 3-4 days a week; 4) 5-6 days a week; and 5) Every day. Mean values close to 1 mean low consumption of that food, whereas mean values close to 5 means high consumption.

Social media use. To determine the frequency of use of social media, they were asked how frequent they used Instagram, Facebook, WhatsApp, TikTok and YouTube, the options of answer for each social media were: 1) Never; 2) Almost never; 3) Sometimes; 4) Almost always; and 5) Always.

Self-perception of diet, physical activity and health. The following question was made to determine the perception adolescents had of their diet: How is your diet? and they had to choose one of the following possible answers: 1) Very bad; 2) bad; 3) Average; 4) Good; and 5) Excellent.

The following question was made to determine the perception adolescents had of their physical activity: What is the level of your physical activity? and they had to choose one of the following possible answers: 1) Inactive; 2) Not very active; 3) Moderately active; 4) Active; and 5) Very active.

Finally, to know the perception of adolescents regarding their health, they were asked: What do you think of your Health status? And they had to choose one of the following possible answers: 1) Very bad; 2) bad; 3) Average; 4) Good; and 5) Excellent.

Statistical Analysis

The program SPSS version 27 was used for the descriptive analysis of normality, correlation, and comparison of variables. Normality was determined with the Kolmogorov-Smirnov test ($p > .05$). Variables are described by mean (*M*) and standard deviation (*SD*). To observe the correlation among variables, a bivariate correlated test was made using Spearman's correlation coefficient, considering a small correlation when the coefficient (r_s) is from 0.10 to 0.29, moderate from 0.30 to 0.49 and large from 0.50 to 1 (Bologna, 2022; Cohen, 1988).

Additionally, the differences of each variable, regarding sex and social setting, were determined by the Mann-Withney *U* test for independent samples. Associations and differences with the value of $p < .05$ were considered significant, whereas the effect size was determined by Hedges' *G*.

Results

Descriptives

In Table 1, means and standard deviations are presented, as well as correlation coefficients of data. The consumption of RFD was positively correlated with the perception of diet, physical activity and health. These final three were also positively correlated between them, whereas consumption of NRFD was positively correlated with the use of social media.

Table 1
Descriptive statisticals of the studied variables

Variable	*M*	*SD*	1	2	3	4	5
1. RFD	2.85	0.62	-				
2. NRFD	2.39	0.58	.092	-			
3. Social media	3.46	0.64	-.045	.138*	-		
4. Diet perception	3.44	0.76	.243**	-.013	-.097	-	
5. Physical activity perception	3.16	1.07	.313**	-.061	-.067	.278**	-
6. Health perception	3.80	0.86	.131*	-.056	-.087	.451**	.350**

Note. M = mean; *SD* = standard deviation; RFD = recommended food for daily consumption; NRFD = not recommended food for daily consumption.
*$p < .05$; **$p < .01$.

Associations between the use of different social media and the consumption of RFD, NRFD, self-perception of diet, physical activity and health, were not found, with the exception of the use of TikTok, which was associated in a negative way with the self-perception of diet and physical activity, and the use of WhatsApp and YouTube, associated positively with the consumption of RFD.

Diet. When the frequency of food consumption was compared by sex, significant differences for the consumption of RFD and NRFD were not observed, but it was observed by setting, because adolescents living in a rural setting consumed more frequently NRFD in comparison to adolescents from the urban setting (U = 9458.5, p = .000, G = 0.48).

In Tables 2 and 3, mean and significance for each group of food analyzed by sex and setting, respectively. A higher frequency in the consumption of food from animals by boys was observed, whereas girls consume more sweet food. Adolescents from the urban setting consume significantly more fish, whereas those from the rural setting consume fruits, food and sweet beverages more frequently.

Table 2
Means of consumption of food by sex

Food	Sex	*M*	*SD*	*U*	*p*	*G*
Recommended food for daily consumption						
Vegetables	Boys	3.03	1.07	12925,00	.989	0.02
	Girls	3.06	1.21			
Fruits	Boys	3.27	1.29	12002,00	.254	0.13
	Girls	3.44	1.20			
Dried fruits	Boys	2.08	1.01	12323,00	.439	0.07
	Girls	2.01	0.99			
Cow milk	Boys	2.64	1.37	10081.00	**.000**	**0.38**
	Girls	2.13	1.27			
Fish	Boys	2.26	0.93	9698.50	**.000**	**0.46**
	Girls	1.85	0.84			
Egg and/or chicken (not fried)	Boys	2.87	1.18	10963.00	**.016**	**0.27**
	Girls	2.54	1.20			
Natural water (unflavoured)	Boys	4.48	0.92	11709.50	.056	0.09
	Girls	4.57	0.97			

Food	Sex	*M*	*SD*	*U*	*p*	*G*
Not Recommended food for daily consumption						
Cereal in a box	Boys	2.21	1.11	11711.00	.127	0.11
	Girls	2.08	1.18			
Candies, ice cream, cakes, cookies	Boys	2.33	0.95	11011.00	**.015**	**0.27**
	Girls	2.60	1.03			
Beef and/or pork meat	Boys	2.82	0.88	11282.00	**.038**	**0.22**
	Girls	2.60	1.02			
Food not cooked at home	Boys	2.20	0.76	11933.00	.181	0.10
	Girls	2.12	0.81			
Cold meat, egg and/or fried chicken	Boys	2.30	0.95	12279.00	.402	0.10
	Girls	2.21	0.84			
Dairy beverages with sugar	Boys	2.17	0.98	12162.50	.335	0.16
	Girls	2.35	1.17			
Juices, water with sugar, sodas	Boys	2.67	1.17	12013.00	.258	0.13
	Girls	2.83	1.22			

Note. M = mean; *SD* = standard deviation; *U* = Mann-Whitney U; *p* = statistical significance; *G* = Hedges' G

Table 3
Means of consumption of food by setting

Food	Setting	*M*	*SD*	*U*	*p*	*G*
Recommended food for daily consumption						
Vegetables	Rural	3.08	1.15	12843.5	.624	0.05
	Urban	3.02	1.16			
Fruits	Rural	3.56	1.27	11218.5	**.014**	**0.26**
	Urban	3.23	1.19			
Dried Fruits	Rural	2.12	1.06	12396.5	.288	0.15
	Urban	1.97	0.94			
Cow milk	Rural	2.35	1.50	12638.5	.458	0.01
	Urban	2.33	1.19			
Fish	Rural	1.81	0.80	10408.5	**.000**	**0.40**
	Urban	2.17	0.94			
Egg and/or chicken (not fried)	Rural	2.55	1.23	11713.0	.064	0.18
	Urban	2.77	1.17			
Natural water (unflavoured)	Rural	4.51	0.98	12971.0	.670	0.04
	Urban	4.55	0.93			

Food	Setting	*M*	*SD*	*U*	*p*	*G*
Not Recommended food for daily consumption						
Cereal in a box	Rural	2.22	1.23	12582.5	.412	0.13
	Urban	2.07	1.09			
Candies, ice cream, cakes, cookies	Rural	2.73	0.99	10017.0	**.000**	**0.42**
	Urban	2.31	0.97			
Beef and/or pork meat	Rural	2.78	1.03	12311.0	.245	0.17
	Urban	2.61	0.92			
Food not cooked at home	Rural	2.22	0.87	12478.0	.311	0.15
	Urbano	2.10	0.73			
Cold meat, egg and/or fried chicken	Rural	2.33	0.87	11958.5	.104	0.16
	Urbano	2.18	0.90			
Dairy beverages with sugar	Rural	2.56	1.12	9642.5	**.000**	**0.47**
	Urbano	2.05	1.02			
Juices, water with sugar, sodas	Rural	2.99	1.19	10720.5	**.002**	**0.33**
	Urbano	2.59	1.18			

Note. *M* = mean; *SD* = standard deviation; *U* = Mann-Whitney U; *p* = statistical significance; *G* = Hedges' G

Use of social media. When the frequency of the use of social media by adolescents was analyzed, girls presented higher values in comparison to boys ($U = 10315.0$, $p = .002$, $G = 0.34$). Differences by social setting were not observed.

Girls use more frequently Instagram ($p = .003$), WhatsApp ($p < .001$) and TikTok ($p < .001$), whereas boys YouTube ($p < .001$). When analyzed by setting, adolescents in rural setting use more frequently Facebook ($p = .002$) and WhatsApp ($p < .001$), while adolescents from urban setting use more Instagram ($p = .001$), TikTok ($p = .026$) and YouTube ($p = .003$).

Self-perception of diet, physical activity and health. Boys reported a better perception of their diet ($U = 9858.5$, $p = .000$, $G = 0.45$), of their level of physical activity ($U = 8106.5$, $p = .000$, $G = 0.71$) and health status ($U = 8674.5$, $p = .000$, $G = 0.64$) than girls. Significant differences were not observed for these variables by social setting.

Discussion

This study analyzed the relation between recommended and not recommended food for daily consumption, with the use of social media, the self-perception of diet, physical activity and health of Mexican adolescents, by sex and social setting.

As reported by Shamah-Levy *et al.* (2020), boys presented a higher intake of not processed meat and egg than girls. In addition, in this study a higher consumption of cow milk, chicken and fish by boys was observed. In general terms, they consume a higher amount of not processed food from animals. This partially corresponds with the findings of Morales *et al*. (2021), they found a higher consumption of red meat by boys, but white meat was more consumed by girls. Girls significantly consume more sweet food, ice cream, cakes, cookies, which is consistent with studies made in adolescents from other countries (Gómez-Salas *et al.*, 2019; Ha *et al.*, 2016), but differs with reports made by Mesana *et al.*, (2018). It is necessary to regulate this food to avoid its complications in the long term (Magriplis *et al.*, 2021).

Contrary to reports made by Shamah-Levy *et al.* (2020), differences by setting are not observed in the consumption of natural water, vegetables, fast food or meat, but it was observed in the consumption of sweet dairy beverages, being adolescents from the rural setting those who consumed these types of beverages. Also, these findings show a higher consumption of fruits and non-dairy food and beverages rich in added sugars in adolescents from the rural setting, and a higher consumption of fish by adolescents in the urban setting, whereas Shamah-Levy *et al.* (2020), did not report differences in these groups of food by setting. Access to food, preference and practicality determine diet habits (Martínez-Hernández *et al.*, 2021; Rodríguez-Villamil & Arboleda-Montoya, 2022), that is why is important to raise awareness and facilitate availability of healthier and practical food that adolescents can access better and choose food that gives a higher quality of nutrients.

The findings show that a higher consumption of RFD by adolescents is associated to a better self-perception of diet, level of physical activity and health. On the other hand, a higher consumption of NRFD is correlated to higher use of social media. This is consistent to reports made in a systematic review by Rounsefell *et al.* (2020), where they found that participation and exposure to visual content is associated to a choice of food that is not very healthy.

According to Urrutia *et al.* (2010), boys have a better perception of their health than girls. Associations between the use of social media and the perception of diet,

level of physical activity and health were not found, which differs with Rounsefell *et al.* (2020), who found that adolescents who are more exposed to social media have a worse self-perception.

Finally, this study provides relevant information about the relation between the perception adolescents in this study have of their diet, their physical activity and their health status, which is positive and significant among each other, observing higher levels in boys than girls. Although the date not many studies that have researched about self-perception of the level of physical activity are known, authors such as Ventura-Cruz *et al*. (2022) demonstrate that a better perception of physical activity is associated with a more positive perception of their health, being boys those who, as shown in this study, are perceived to be more active and healthier.

Conclusions

In conclusion, adolescents' dietary patterns appear to be influenced by both intrinsic and extrinsic factors, such as sex and living environment. Girls, as well as adolescents living in rural areas, tend to consume foods with higher sugar content, whereas boys tend to consume more foods of animal origin. Although social media use does not appear to influence adolescents' perceptions of their diet, physical activity levels, or health status, it does seem to affect their food choices. Greater exposure to social media was associated with higher consumption of NRFD.

A limitation of this study was the use of non-validated, self-reported questionnaires, which may have introduced a certain degree of bias. Future research should address this limitation by employing validated and objective instruments tailored to the target population. Another limitation was that the study included only two municipalities: one rural and one urban. Including participants from a larger number of cities and communities would enhance the generalizability of the findings to a country as large and diverse as Mexico, and potentially to other countries in the region.

References

Bologna, E. (2022). *Capítulo 14: Tamaño del efecto en Un Recorrido por los Métodos Cuantitativos en Ciencias Sociales a bordo de R*. https://estadisticacienciassocialesr.rbind.io/

Chung, A., Vieira, D., Donley, T., Tan, N., Jean-Louis, G., Kiely Gouley, K., & Seixas, A. (2021). Adolescent Peer Influence on Eating Behaviors via Social Media: Scoping Review. *Journal of medical Internet research, 23*(6), e19697. https://doi.org/10.2196/19697

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Academic press. https://www.utstat.toronto.edu/~brunner/oldclass/378f16/readings/CohenPower.pdf

Del Razo-Olvera, F. M. (2020). *Definición de una dieta saludable.* https://alimentacionysalud.unam.mx/definicion-de-una-dieta-saludable/#:~:text=Una%20dieta%20saludable%20al%20igual,en%20los%20cuales%20se%20utiliza

Denova-Gutiérrez, E., Ramírez-Silva, I., Rodríguez-Ramírez, S., Jiménez-Aguilar, A., Shamah-Levy, T., & Rivera-Dommarco, J. A. (2016). Validity of a food frequency questionnaire to assess food intake in Mexican adolescent and adult population. *Salud Pública de México, 58*(6), 617. https://doi.org/10.21149/spm.v58i6.7862

Diario Oficial de la Federación. (2014). *Reglamento de la ley general de salud en materia de investigación para la salud.* https://www.diputados.gob.mx/LeyesBiblio/regley/Reg_LGS_MIS.pdf

Golpe-Ferreiro, S., Salgado, P. G., Harris, S. K., Tobío, T. B., & Boubeta, A. R. (2017). Diferencias de sexo en el uso de internet en adolescentes españoles. *Psicología Conductual, 25*(1), 129.

Gómez-Salas, G., Quesada-Quesada, D., Chinnock, A., Nogueira-Previdelli, A., & ELANS, G. (2019). Consumo de azúcar añadido en la población urbana costarricense: estudio latinoamericano de nutrición y salud ELANS-Costa Rica. *Acta Médica Costarricense, 61*(3), 111-118. https://doi.org/10.51481/amc.v61i3.1038

Ha, K., Chung, S., Joung, H., & Song, Y. (2016). Dietary sugar intake and dietary behaviors in Korea: a pooled study of 2,599 children and adolescents aged 9-14 years. *Nutrition research and practice, 10*(5), 537-545. https://doi.org/10.4162/nrp.2016.10.5.537

Kucharczuk, A. J., Oliver, T. L., & Dowdell, E. B. (2022). Social media's influence on adolescents' food choices: A mixed studies systematic literature review. *Appetite, 168*, 105765. https://doi.org/10.1016/j.appet.2021.105765

Magriplis, E., Michas, G., Petridi, E., Chrousos, G. P., Roma, E., Benetou, V., Cholopoulos, N., Micha, R., Panagiotakos, D., & Zampelas, A. (2021). Dietary Sugar Intake and Its Association with Obesity in Children and Adolescents. *Children, 8*(8), 676. https://doi.org/10.3390/children8080676

Martínez-Hernández, V. R., Sandoval-Copado, J. R., & Aranzana, J. M. (2021). Acceso a los alimentos y hábitos alimentarios de jóvenes universitarios, Estado de México. *Revista Salud Pública y Nutrición, 20*(3), 36-45. https://www.medigraphic.com/pdfs/revsalpubnut/spn-2021/spn213e.pdf https://doi.org/10.29105/respyn20.3-5

Meltwater. (2024). *Digital 2024 Global overview report.* https://drive.google.com/file/d/1VYTJJx_1QZw_71NrlHRffer0XbN3t_yQ/view

Mesana, M. I., Hilbig, A., Androutsos, O., Cuenca-Garcia, M., Dallongeville, J., Huybrechts, I., De Henauw, S., Widhalm, K., Kafatos, A., Nova, E., Marcos, A., González-Gross, M., Molnar, D., Gottrand, F., & Moreno, L. A. (2018). Dietary sources of sugars in adolescents' diet: The HELENA study. *European journal of nutrition, 57*(2), 629-641. https://doi.org/10.1007/s00394-016-1349-z

Moral-García, J. E., Fernandez Gonzalez, F. L., DelCastillo-Andrés, O., & Flores Aguilar, G. (2023). Análisis desde el ámbito escolar: uso de las redes sociales vs. práctica de actividad física. *Journal of Sport and Health Research. 15*(2):419-428. https://doi.org/10.58727/jshr.92904

Morales Pérez, A. R., Rodríguez Ribalta, I., Massip Nicot, J., Sardinas Arce, M. E., Balado Sansó, R., & Morales Viera, L. (2021). Preferencias y conductas alimentarias en adolescentes de secundaria básica. *Revista Cubana de Pediatría, 93*(2). http://scielo.sld.cu/pdf/ped/v93n2/1561-3119-ped-93-02-e968.pdf

Moreira de Freitas, R. J., Carvalho Oliveira, T. N., Lopes de Melo, J. A., do Vale e Silva, J., de Oliveira e Melo, K. C., & Fontes Fernandes, S. (2021). Percepciones de los adolescentes sobre el uso de las redes sociales y su influencia en la salud mental. *Enfermería Global, 20(*64), 324-364. https://dx.doi.org/10.6018/eglobal.462631

Moreno-Muciño, O., Medina-Rodríguez, R. E., Enríquez-Reyna, M. C., González, J. G., & Ceballos Gurrola, O. (2021). Actividad física y uso de redes sociales en estudiantes de secundaria. Diferencias por sexo y grado escolar. *Retos, 42*, 276-285. https://doi.org/10.47197/retos.v42i0.86364

Rodríguez-Villamil, N., & Arboleda-Montoya, L. M. (2022). Estrategias de afrontamiento para acceder a los alimentos en hogares del departamento de Antioquia, Colombia. *Cadernos de Saúde Pública, 38*, e00146521. https://doi.org/10.1590/0102-311X00146521

Rosales, P., & Gutiérrez-Hernández, R. (2022). Impacto de las redes sociales en la percepción de cuerpo saludable en el adolescente. *Ciencia Nutrición Terapéutica Bioética, 1*(2). https://revistas.uaz.edu.mx/index.php/cinteb/article/view/1479/1218

Rounsefell, K., Gibson, S., McLean, S., Blair, M., Molenaar, A., Brennan, L., Truby, H., & McCaffrey, T. A. (2020). Social media, body image and food choices in healthy young adults: A mixed methods systematic review. *Nutrition & dietetics: the journal of the Dietitians Association of Australia, 77*(1), 19-40. https://doi.org/10.1111/1747-0080.12581

Sánchez-Romero, C., & López-Berlanga, M. C. (2020). Percepción de actitudes nocivas en el uso de las redes sociales en los jóvenes adolescentes. *Revista Interuniversitaria de Investigación en Tecnología Educativa* (8), 1-13. http://dx.doi.org/10.6018/riite.401801

Shamah-Levy, T., Vielma-Orozco, E., HerediaHernández, O., Romero-Martínez, M., MojicaCuevas, J., Cuevas-Nasu, L., Santaella-Castell, J.A., & Rivera-Dommarco, J. (2020). *Encuesta Nacional de Salud y Nutrición 2018-19: Resultados Nacionales.* Cuernavaca, México. Instituto Nacional de Salud Pública. https://doi.org/10.21149/12280

Shimoga, S. V., Erlyana, E., & Rebello, V. (2019). Associations of Social Media Use With Physical Activity and Sleep Adequacy Among Adolescents: Cross-Sectional Survey. *Journal of medical Internet research, 21*(6), e14290. https://doi.org/10.2196/14290

United Nations Children's Fund. (2019). *Estado mundial de la infancia 2019: Niños, alimentos y nutrición. Crecer bien en un mundo en transformación. Resumen Ejecutivo.* https://www.unicef.org/media/61091/file/Estado-mundial-infancia-2019-resumen-ejecutivo.pdf

Urrutia, S., Azpillaga, I., de Cos, G. L. & Muñoz, D. (2010). Relación entre la percepción de estado de salud con la práctica físico-deportiva y la imagen corporal en adolescentes. *Cuadernos de Psicología del Deporte, 10*(2), 51-56. https://revistas.um.es/cpd/article/view/111271/105621

Ventura-Cruz, V. A., Pacheco, L. M., Peña-Polanco, J. J., Cruceta-Gutiérrez, J. F., Arias-Ureña, J. L., & Bennasar-García, M. I. (2022). Relación entre imagen corporal e índice de actividad física en adolescentes. *Polo del Conocimiento: Revista científico-profesional, 7*(6), 743-755. https://doi.org/10.23857/pc.v7i6.4101

Wilksch, S. M., O'Shea, A., Ho, P., Byrne, S., & Wade, T. D. (2020). The relationship between social media use and disordered eating in young adolescents. *The International journal of eating disorders, 53*(1), 96-106. https://doi.org/10.1002/eat.23198

World Health Organization. (2018). *Alimentación sana*. https://www.who.int/es/news-room/fact-sheets/detail/healthy-diet

World Health Organization. (2021). *Obesidad y sobrepeso*. https://www.who.int/es/news-room/fact-sheets/detail/obesity-and-overweight

World Health Organization. (2023). *Enfermedades no transmisibles*. https://www.who.int/es/news-room/fact-sheets/detail/noncommunicable-diseases

Contribution Statement

Author 1 (lead) participated in conceptualization, research, methodological design, data analysis, and writing of the manuscript and review the final manuscript. Author 2 (equal) participated in conceptualization, information analysis, review and translation. Author 3 (equal) participated in the research, methodological, data interpretation and editing of the final manuscript. All the authors participated in the elaboration of this article.