Nutrición Hospitalaria

Nutrición saludable en atención primaria: instrumento sobre el conocimiento, percepción y consumo de productos azucarados en la población adulta

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ABSTRACT

Introduction: it is necessary to develop an instrument that enables identifying unhealthy eating habits, and to know those erroneous concepts that the adult population may have in relation to sugary products to be able to design and implement appropriate nutritional education strategies for this population sector.

Aim: to perform the content validation of a questionnaire to determine the level of knowledge, perception, and habits of sugary product consumption in the adult population through expert judgement.

Methods: it is a content and psychometric validation study, carried out between September and October of the last year, in which 13 experts participated, who assessed each one of the instrument's items. Fleiss' *kappa* coefficient was used with the aim of measuring the degree of agreement. A pre-test was performed with 237 participants to measure the degree of comprehensibility of the instrument.

Results: the strength of agreement reached for the dimensions of knowledge and opinion regarding sugary product consumption was almost perfect, and substantial for behaviour with respect to said products. The strength of agreement fluctuated between moderate and almost perfect for each pair of experts. The characteristics of sufficiency and relevance obtained the highest scores using Fleiss' according to the degree of overall agreement between experts. The new version of the questionnaire achieved a high degree of comprehensibility.

Conclusions: the results suggest that the instrument is valid and can be applied in future studies to evaluate knowledge, perceptions and habits about sugary products in the adult population, thus contributing to the prevention of chronic diseases and the promotion of a better quality of life.

Keywords: Content validity. Expert judgement. Feeding behaviour. Primary care nursing. Questionnaire. Validation study.

RESUMEN

Introducción: es necesario desarrollar un instrumento que permita identificar hábitos alimentarios poco saludables, y conocer aquellos conceptos erróneos que pueda tener la población adulta con relación a los productos azucarados para poder diseñar e implementar estrategias de educación nutricional adecuadas para este sector poblacional.

Objetivo: realizar la validación de contenido de un cuestionario para determinar el nivel de conocimiento, percepción y hábitos de consumo de productos azucarados en la población adulta mediante juicio de expertos.

Métodos: se trata de un estudio de validación de contenido y psicométrica, realizado entre septiembre y octubre del año pasado, en el que participaron 13 expertos, quienes evaluaron cada uno de los ítems del instrumento. Se utilizó el coeficiente *kappa* de Fleiss con el objetivo de medir el grado de acuerdo. Se realizó un pretest con 237 participantes para medir el grado de comprensibilidad del instrumento.

Resultados: la fuerza de acuerdo alcanzada para las dimensiones de conocimiento y opinión sobre el consumo de productos

azucarados fue casi perfecta, y sustancial para el comportamiento respecto de dichos productos. El grado de acuerdo fluctuó entre moderado y casi perfecto para cada par de expertos. Las características de suficiencia y relevancia obtuvieron las puntuaciones más altas utilizando la de Fleiss según el grado de acuerdo global entre expertos. La nueva versión del cuestionario logró un alto grado de comprensibilidad.

Conclusiones: los resultados sugieren que el instrumento es válido y puede ser aplicado en futuros estudios para la evaluación de conocimientos, percepciones y hábitos sobre productos azucarados en la población adulta, contribuyendo de esta forma a la prevención de enfermedades crónicas y la promoción de una mejor calidad de vida.

Palabras clave: Validez de contenido. Juicio de expertos. Conducta alimentaria. Enfermería de atención primaria. Cuestionario. Estudio de validación.

INTRODUCTION

It should be highlighted that the ultra-processed food industry has become an important element that negatively influences eating habits leading to an increase in the rate of overweight and obesity, as well as non-communicable diseases (NCDs), among which it is worth highlighting: cardiovascular diseases, type 2 diabetes *mellitus,* frailty in the elderly, cavities and cancer (1,2).

Likewise, the production of ultra-processed foods is ever increasing, being more accessible to both the adult and juvenile population. The selection of products rich in added sugars, saturated fats and salt, in addition to additive substances, is on the rise and currently provides between 25-50 % of the total calorie intake (3). It should, therefore,

be indicated that globalization and industrialization are bringing about a change in the eating habits in the majority of countries (4).

This situation leads to a poorer quality of the population's diet which, moving away from the dietary recommendations established by the WHO, presents a greater risk of suffering from any non-communicable disease, such as obesity, cardiovascular pathologies, and diabetes *mellitus,* among others (5). In this regard, according to the World Health Organization (WHO), more than 650 million people over the age of 18 are obese worldwide, which is about 13 % of the global adult population (11 % of men and 15 % of women), figures which have tripled since 1975 (6).

There is an evident need for the political, educational and healthcare institutions to reinforce nutritional education in the population, with the aim of restricting or reducing the consumption of ultra-processed products (7).

In the one hand, primary care has become a key link for the prevention of chronic diseases internationally, the incidence of which continues to increase progressively. This primary prevention represents a great effort for both the health system and patients (8).

In this way, the importance of nurses in primary care becomes evident, who play a key role in the implementation of health interventions, based on health promotion, disease prevention and management of chronic diseases, given their dual role in clinical practice and research (9,10).

Nutrition is one of the main nursing interventions in primary care for the modification of healthy lifestyles. Generally, dietary guidelines to improve nutritional status and/or weight loss have been based on proportional recommendations for macronutrients, promoting the Mediterranean diet and avoiding the consumption of ultra-processed foods. Currently, it is considered that dietary advice should be individually tailored and consider personal, cultural, and socioeconomic factors (11,12).

On the other hand, despite the relevance of this issue, there is no validated instrument that makes it possible to ascertain the knowledge, perception, and habits of sugary product consumption in the adult population and which facilitates the development and implementation of adequate nutritional education strategies (13). Likewise, it is vital to determine those factors that may be negatively affecting the population's diet, since eating is not only a biological fact, but it can also be influenced by social, economic and cultural factors. In this way, it is possible to influence those factors that involve an appropriate choice of food based on its healthiest characteristics (14,15).

It is, hence, necessary to develop an instrument that enables identifying unhealthy eating habits, and to know those erroneous concepts that the adult population may have in relation to sugary products to be able to design and implement appropriate nutritional education strategies for this population sector (16).

Validity and reliability are two basic characteristics that an instrument must fulfil to be able to guarantee its quality and thus be used by researchers in studies. There are different types of validation methods, including content validity, criteria validity and construct validity, the latter being the most complex (17). The validation criteria used in the present study was content validity. Content validity can be defined as "the degree to which the elements of the measuring instrument are integral, relevant and representative of the construct for a particular evaluation purpose" (18).

Although there are different methods to determine content validity, the expert judgement is the most widely used; it is based on the informed opinion of people with experience in the subject matter, who are recognized as qualified experts in it, and who can give information, evidence, judgements, and assessments. The experts will assess each one of the items that make up the questionnaire, using a numerical scale as part of the procedure (19-21). The

researcher will subsequently thoroughly analyze each one of the ratings and will determine what to modify, improve or remove from the instrument to be validated (22).

No published articles were identified that considered how nurses detect errors in patients' dietary habits, in this case, in sugar consumption. This study sought to fill this deficit in knowledge and a tool that allows us to detect bad healthy habits, possible prediabetic patients who can progress to DM2, and provide adequate nutritional education.

It is important to highlight that excessive sugar consumption has been identified as a critical factor in the development of chronic non-communicable diseases. such as obesity, type 2 diabetes and cardiovascular problems. This approach allows for a detailed analysis of the specific knowledge, perceptions and habits related to added sugars, which tend to be less regulated by the population due to sociocultural and marketing factors that normalize their consumption. In this way, a specific questionnaire can offer a better understanding of these beliefs and behaviors, which helps to develop more effective and focused educational interventions.

Thus, while global diet questionnaires such as the Mediterranean diet are valuable tools for a comprehensive view, they tend to dilute the risk factors specifically associated with sugar consumption. By focusing the questionnaire on a single aspect, such as sugary products, specific details and barriers can be identified that might be missed in an overall assessment, thus providing a more accurate perspective for intervention interventions.

Finally, this specific questionnaire can complement other broader instruments by providing data on a particularly relevant and critical dietary aspect in current health, optimizing resources and efforts in nutritional education interventions aimed at reducing sugar consumption.

Therefore, the objective of this study was to present the procedure for the development and content validation of an instrument to

determine the degree of knowledge, perception, and habits of sugary product consumption in the adult population through an expert judgement.

METHODS

Study design

Descriptive study, of content validity through expert judgement, performed in the University of Granada (Melilla).

Participants

The sample, selected due to convenience, was formed by 13 professionals from different disciplines and faculties with an experience of between 5 and 20 years in teaching and research, who voluntarily accepted to take part. The exclusion criteria were the failure to complete the informed consent and submit the questionnaire within the deadline set. Table I shows the areas of knowledge and professional experience of each one of the experts.

Data collection

The content questions related to knowledge, behaviour and opinion regarding sugary product consumption were selected after a literature review using the Web of Science and Scopus databases. Finally, 22 questions were proposed, grouped in the three indicated dimensions (knowledge, behaviour and opinion) with 10, 4 and 8 items, respectively.

An e-mail was sent to the experts with the information on the study's main objective, the questionnaire to validate and how to respond, as well as the confidentiality guarantee (cover letter). The experts were given one month to assess, score the questionnaire and return the reply electronically to the researchers.

Once the questionnaire was assessed by the experts, and after taking into consideration the qualitative suggestions made to it, the resulting instrument underwent the standard pre-test with potential

recipients to have information about the Instrument's behaviour in real life (23).

To this end, a dichotomous yes/no response was encoded in each of the items to measure the degree of interpretation, as well as their applicability/feasibility. The sample (stratified random) that performed the pre-test was made up of 237 Nursing Degree students. The study was carried out between September and October of 2023 and conclusions derived were drawn during the period of November-December 2023.

Data analysis

The data collected were statistically processed using the SPSS software, version 26.0 for Windows. The degree of agreement between the experts was determined using Fleiss' *kappa* coefficient as the statistical test to evaluate the agreement between three or more raters that independently judge a series of items using an instrument with a certain number of ordinal categories (24-26). The scale established by Landis and Koch [27] (which qualitatively expresses the strength of agreement between raters) was taken into account for the interpretation of Fleiss' *kappa* coefficient, which takes values between 0 and 1.

For the analysis of the judges' qualitative considerations on the congruence of the items, breadth of content, wording, clarity and relevance, a Likert-type rating scale was used, attributing categories and rating points, poor, acceptable, good, and excellent, according to your consideration. Items that met all the established requirements were classified as "adequate", items that required some changes were classified as "partially adequate", and items that expressed total inconsistency in relation to the expressed criteria were classified as "inadequate". In cases where it was considered inadequate, the reasons were explained, the suggestions described, and the content redone and improved.

Basic statistics (frequencies and percentages) were used for the analysis of the data gathered in the pre-test.

Validity and reliability

Validity and reliability were considered carefully in design and implementation of the study. The COPEHPA ("Knowledge, perception and habits of sugary product consumption") was assessed from the rating of each item, using the "Template for assessing content validity through expert judgement" developed by Escobar-Pérez and Cuervo-Martínez (20), which establishes four levels: does not meet the criterion, low level, moderate and high level for the characteristics assessed: sufficiency, clarity, coherence and relevance (Table II). The indicator "one" of the categories was assigned when the item did not conform to the category, up to indicator "four", which was assigned when the item fully conformed to the category (only sufficiency was scored by dimension rather than by item). The experts' qualitative observations for each of the 20 items that made up the initial instrument were also considered as reflected in the statistical analysis section.

The percentage of comprehension and the degree of comprehensibility was established as: high comprehensibility (equal to or greater than 85 %), medium comprehensibility (80 to 85 %) and low comprehensibility (less than 80 %).

Ethical considerations

The study was conducted in accordance with the Declaration of Helsinki and approved by the Institutional Review Board of the Provincial Board of Education of Melilla (protocol code 201802658 on 10 April 2018). All participants were informed of the study's objectives, with voluntary participation and signing of the informed consent.

RESULTS

Content validation through expert judgement

To evaluate the original instrument, the proportion of possible agreements occurring in each dimension was considered in the calculation of Fleiss' *kappa* coefficient. The magnitude in the strength of agreement by the set of experts was estimated to be almost perfect, for 2 dimensions (knowledge and opinion regarding sugary product consumption), and as substantial for the behaviour with respect to said products, as observed in table III.

Likewise, Fleiss' *kappa* coefficient was determined by pairs of experts, finding a greater variability, between moderate and almost perfect, revealing a disagreement especially in the dimension of behaviour with respect to sugary products as observed in table IV.

Furthermore, the characteristics of the instrument were entirely estimated based on the categorical indicators of sufficiency, clarity, cohesion, and relevance, according to the ordinal measurement scale. A strength of agreement between substantial and almost perfect was found, with the sufficiency and relevance characteristics being the highest (0.832 and 0.903, respectively), according to the overall agreement between experts. With respect to the statistical significance of these characteristics, in all cases a behaviour of 95 % confidence with a significance $p < 0.05$ was found. The "sufficiency" and "relevance" characteristics are especially relevant, with $p=.001$, as observed in table V.

These results, together with the observations and recommendations issued qualitatively by the experts to the items contained in the four dimensions established, led to the final questionnaire.

Measurement of applicability: pre-test

To determine the percentage of comprehension of the dimensions and their corresponding items, the validated final instrument was completed by a total of 237 students from the Nursing Degree. They

were all valid. The analysis of the data (percentages of yes/no responses given by the participants) made it possible to establish the degree of comprehensibility of the instrument in the highest range with comprehension percentages equal to or greater than 91 % in all the items, as set down in table VI. The overall comprehensibility of the final validated questionnaire was established at 96.2 %.

DISCUSSION

Although there has been much involvement by different institutions, and even the large international companies from the food sector, who have reduced sugar content in their food by approximately 36 %, there are still processed foods with high quantities of sugar that continue to be harmful for health (28).

There are currently no instruments in existence that measure the knowledge, perception, and habits in relation to sugary products in the general population. However, studies do exist which demonstrate the population's lack of knowledge with regard to sugary drinks, and the high consumption of these products (29-31).

The key concept of content validity is that the items of a measuring instrument are relevant and representative (32). As demonstrated by Utkin (33), the information transmitted through expert judgement is usually more useful in those areas where the experimental observations are limited. This statement is particularly true in the health area, where said judgement has become the main strategy to estimate content validity (20).

Although there are other ways to evaluate the diet, such as global questionnaires that evaluate the general quality of the diet, such as the Mediterranean Diet Adherence questionnaire, the questionnaire developed in this study allows a more specific and detailed analysis of product sugar-sweetened product consumption, a key factor in the appearance of the pathologies mentioned above. This specificity

responds to the progressive need to evaluate and modify eating behaviors that represent a risk (34).

Unlike comprehensive dietary assessment tools that provide an overview of diet quality but can dissolve specific risk factors such as sugar consumption, our questionnaire allows primary care nurses, as well as the health professionals involved, identify and understand behavioral patterns specifics related to sugary products. As Warshaw and Edelman (35) state, this approach is particularly useful in consultations where time is limited and a rapid and direct diagnosis of risk habits in the patient's diet is required. Thus, instead of evaluating all aspects of the diet, the questionnaire helps professionals focus their educational and preventive interventions on a priority dietary aspect.

The implementation of this questionnaire in the primary care setting also facilitates the development of personalized nutritional education strategies, adapted to patients´ specific knowledge and perceptions regarding sugar consumption. The identification of erroneous knowledge and beliefs allows health professionals to design interventions aimed at correcting these errors and promoting healthier food choices. This represents a comparison with other general dietary assessment methods, as it provides a more precise basis for addressing sugar consumption in the adult population, allowing for more effective interventions at the first level of care (36).

Greater involvement on the part of health institutions is necessary to achieve optimal and updated strategies adapted to the population. Increasing the number of nurses in public health and more time in consultations with patients could be a first step towards achieving these objectives. However, this questionnaire, within the nursing functions in primary care, allows for early detection of failures in the nutritional habits of the adult population to promote health and prevent chronic diseases. Likewise, for future research it would be necessary to create questionnaires on other

macronutrients such as fats or proteins and thus be able to discover in a more detailed way errors in the patient's nutritional habits.

Limitations

However, there are some limitations inherent to the content validation process, such as definition of the number of people who must form part of the expert judgement, essential for the validation. Thus, although there are different opinions, there is agreement that the number of experts will depend on the level of experience in the area and of the diversity of knowledge. Whilst Hyrkäs et al. (37) declare that 10 experts would offer a reliable estimate of the content validity of an instrument, Voutilainen and Liukkonen (38) state that if 80 % of the experts have been in agreement with the validity of the item, this can be incorporated in the instrument. Likewise, as Koller et al. (39) assert, the quality and diversity of the professionals may be much more significant than their number.

The present study, bearing in mind that the objective was to validate items of a questionnaire on sugary products with the aim of ascertaining the knowledge, perception, and habits with respect to these products, five of the experts were nurses and three were nutritionists. Furthermore, the judges had extensive knowledge in the subject matter, having different forms of experience in the area.

Nevertheless, as stated by Koller et al. (40), in addition to the group of experts, it is effective to include individuals from the reference population, i.e., they are not specialists in the area. In this way, in this work, 237 students from the Nursing Degree of the Faculty of Health Sciences of Melilla of the Universidad de Granada voluntarily took part in the pre-test, obtaining a high degree of comprehensibility of the COPEHPA questionnaire (96.2 %).

CONCLUSIONS

The instrument described in this study aims to cover the need of having a specific, fast, and reliable tool that allows healthcare staff

to know the dietary habits as regards sugary foods, knowledge they have about them and their perceptions. Thus, this questionnaire can be applied both to the healthy adult population and to those who are overweight, have obesity, diabetes *mellitus* and/or any other noncommunicable disease, with the aim of avoiding complications and improving their quality of life.

In summary, content validity by means of Fleiss' *kappa* statistic is useful for measuring the degree of agreement between experts and whose results obtained reveal the objectivity of the instrument. Likewise, the pre-test procedure described provides the determination of the degree of comprehensibility of the final instrument. Therefore, we believe that the objective of validating a measuring instrument has been fulfilled. In this way, we recommend the use of the COPEHPA questionnaire (Annex 1), which, in addition to being easy and quick to use, will allow, from the first level of healthcare assistance, to quickly deal with determining the degree of knowledge, perception and habits of sugary product consumption among the adult population, considering optimum eating behaviour, and thus improving quality of life.

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Table I. Experts, areas of knowledge, education, and professional experience

Expert	Area of knowledge	Years of experience
1	Didactics of Language and Literature	8
2	Didactics of Language and Literature	20
3	Research Methods and Diagnosis in Education	17
4	Research Methods and Diagnosis in Education	9
5	Evolutionary and Educational Psychology	13
6	Health Sciences	18
7	Health Sciences	16
8	Health Sciences	10
9	Health Sciences	8
10	Health Sciences	8
11	Nutrition and Food Science	23
12	Nutrition and Food Science	15

13	Nutrition and Food Science	10

Table II. Categories of the tool for the validation by the judges and indicators

Categories	**Indicators**
Sufficiency The items that belong to the same dimension are sufficient to obtain its measurement	The items are not sufficient to measure the dimension The items measure an aspect of the dimension, but they do not correspond to the total dimension Some items must be increased to be able to completely assess the dimension The items are not sufficient
Clarity The item is easily understood, i.e. its syntax and semantics are appropriate	The item is unclear The item requires several modifications or a very large modification in the use of the words according to their meaning or their ordering. It requires a very specific modification of some of the item's terms The item is clear. It has appropriate syntax and semantics
Coherence The item has a logical	The item has no logical relationship with the dimension

relationship with the dimension or indicator it is measuring	The item has a tangential relationship with the dimension The item has a moderate relationship with the dimension being measured The item is completely related to the dimension being measured
Relevance The item is essential or important, i.e. it must be included	The item can be removed without affecting the measurement of the dimension The item has some relevance, but another item may be including what it measures The item is relatively important The item is highly relevant and must be included

Table III. Strength of agreement between raters for the dimensions of the original instrument

Dimensions	**Fleiss' *kappa* coefficient**	**Strength of agreement (Landis & Koch, 1977)**
Knowledge about sugary products	0.894	Almost perfect
Opinion regarding sugary product consumption	0.870	Almost perfect
Behaviour with respect to sugary products	0.780	Substantial

Table IV. Agreement by pairs of experts

Dimensions	**Fleiss' *kappa* coefficient - agreement by pairs of experts**												
	1-13	**2-12**	**3-11**	**4-10**	**5-9**	**6-8**	**7-8**	**9-6**	**10-5**	**11-4**	**12-3**	**13-2**	**2-1**
Knowledge	0.900	0.834	0.798	0.985	0.817	0.920	1	0.730	0.835	0.785	0.940	0.835	0.819
Opinion	0.991	0.914	0.801	0.770	0.842	0.863	0.911	0.946	0.744	0.734	0.756	0.808	0.849
Behaviour	0.791	0.714	0.831	0.620	0.812	0.763	0.905	0.646	0.716	0.774	0.716	0.632	0.745

Table V. Fleiss' *kappa* coefficient and statistical significance of the characteristics of the original instrument

Characteristics	**Fleiss' *kappa* coefficient**	***p***
Sufficiency	0.832	0.001
Clarity	0.792	0.016
Coherence	0.784	0.018
Relevance	0.903	0.001

Table VI. Percentages of comprehensibility of the dimensions and its items in the final version of the validated instrument

Dimension	Item	Percentage of comprehension (%)	
		Yes	No
Degree of knowledge	Natural sugars	96.2	3.8
	Free sugars in a product	94.9	5.1
	0 % sugar	100	
	Light sugar	91.1	8.9
	Recommended amount for free sugar consumption	100	0.0
	Terminology that indicates a lower quantity of sugar	100.0	0.0
	Excess sugars in the body	100.0	0.0
	Tooth decay and sugar	97.0	3.0
	Decrease in strength, resistance and physiological functions in old age and sugar	100.0	0.0
	Benefits of sugar reduction	100.0	0.0

Perception of sugary	Daily sugar	99.2	0.8
	Interpretation of the nutritional labelling of products	98.3	1.7
	Nutritional labelling and choice, purchase and consumption of products	100.0	0.0
Product consumption	Importance of the choice of food consumption	100.0	0.0
	Knowledge and interpretation of the Mediterranean diet nutritional food pyramid	100.0	0.0
	Implementation of the Mediterranean diet nutritional food pyramid	99.2	0.8
	Best strategy to decrease added sugar intake	100.0	0.0
Consumption habits of sugary products	Consumption frequency of fruit, pastries, snacks or biscuits and sugary drinks	100.0	0.0
	Sugary drink consumption	100.0	0.0
	Type of pastries and brand	100.0	0.0
	Addition of sugar to food and drinks	100.0	0.0

Annex 1. COPEHPA questionnaire

I. Degree of knowledge

1. From the following foods, indicate which do not contain natural sugars (called intrinsic):
   a. Banana
   b. Carrot
   c. Milk
   d. Honey
   e. Don’t know

2. From the following statements about the different types of sugar, indicate the correct one: What do you understand by free sugars in a product?
   a. Intrinsic sugars are those present in just fruit and fruit juice.
   b. Free sugars are those added to foods by manufacturers, cooks or the consumers themselves, including the sugars naturally found in honey, syrups, fruit juices and fruit juice concentrates.
   c. Intrinsic sugar consumption fills you up less than free sugars.
   d. Don’t know

3. What does it mean that a product has 0 % sugar?
   a. That it has no added sugars
   b. That it has less than 0.5 g of sugar in 100 g
   c. That I can eat or drink all that I want without putting on weight
   d. Don’t know

4. What does light sugar mean?
   a. That it contains a 30 % reduction in sugar
   b. That it contains a 50 % reduction in sugar
   c. Don’t know

5. According to the World Health Organization (WHO), what do you think is the recommended amount of free sugar consumption?
   a. Less than 10 % of the total calorie intake

b. More than 10 % of the total calorie intake
c. There is no recommended amount
d. Don’t know

6. What terminology indicates that the product contains a lower amount of sugar?
a. Light sugar
b. Zero sugar
c. Reduced sugar
d. No added sugars
e. Don’t know

7. Excess sugar mainly accumulates in the body as:
a. Energy
b. Fats
c. Proteins
d. Don’t know

8. Tooth decay is directly related to excess sugar:
a. Yes
b. No
c. Don’t know

9. Is there a relation between sugar consumption and the decrease in strength, resistance and physiological functions in old age?
a. Yes
b. No
c. Don’t know

10. Reducing sugar consumption helps to prevent:
a. Diabetes
b. Heart attacks

c. Obesity
d. All are correct
e. Don’t know

II. Perception of sugary product consumption

1. How much sugar do you think you consume daily?
   a. Less than 10 g daily (equivalent to one teaspoon)
   b. Between 10 and 30 g
   c. From 30 to 50 g
   d. Over 50 g

2. Do you consider that you know how to correctly interpret the nutritional labelling of products?
   a. Yes
   b. No

3. Do you think that the interpretation of nutritional labelling helps in the choice, purchase and consumption of products?
   a. Yes
   b. No

4. Do you think that it is important to choose the food you consume?
   a. Always
   b. Sometimes
   c. Never

5. Do you know the Mediterranean diet food pyramid and how to interpret it?
   a. Yes, I know it and know how to interpret it
   b. Yes, I know it, but I don’t know how to interpret it
   c. No, I don’t know it

6. Do you implement the Mediterranean diet food pyramid?
   a. Yes
   b. No

7. What do you think is the best strategy to decrease added sugar intake?
   a. Consume fresh, local and seasonal products
   b. Avoid buying products with large quantities of sugar
   c. Radically remove sugar from our diet

III. Sugary product consumption habits

1. Check the box that corresponds to your consumption frequency with an (X)

	Average consumption									
	Never	**Monthly**			**Weekly**			**Daily**		
		1-3	2-4	5-6	1	2-4	5-6	2-3	4-5	+5
Fruit: banana, apples, pears, watermelon, etc.										
Pastries, snacks, or biscuits: crisps, chocolates, doughnuts, etc.										
Sugary drinks: soft drinks, juices, etc.										

2. Do you usually drink sugary drinks? Please, specify the brand in any of the options except in “never”.
   a. Always

b. Almost always
c. Sometimes
d. Almost never
e. Never

3. What type of pastries do you usually consume?
   a. Commercial pastries. Specify the brand: _____

   b. Homemade pastries. Specify the type of pastries you usually consume: _____
   c. I don’t consume pastries/baking.

4. Do you usually add sugar to food and drinks?
   a. Always
   b. Almost always
   c. Sometimes
   d. Almost never
   e. Never