PEER REVIEW HISTORY

BMJ Paediatrics Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Advertising, obesity and child health: the case of Spain
AUTHORS	Gómez, S F
	Rajmil, Luis

VERSION 1 – REVIEW

REVIEWER	Reviewer name: Dr. Simon Lenton Institution and Country: Maple Grove Bath, United Kingdom of Great Britain and Northern Ireland
	Competing interests: None
REVIEW RETURNED	06-May-2022

GENERAL COMMENTS	Advertising, obesity and child health: the case of Spain
COMMENTS	This is a very timely editorial coinciding, as it does, with the World Health Organisation publication on European Regional Obesity Report 2022*. The paper briefly outlines the ill effects of obesity, the current levels in Spain, and outlines the advertising restrictions in Spain, the UK, Portugal, France and Sweden without reference to their impact on obesity. The evidence of effectiveness of "advertising bans" is poor-despite a systematic review suggesting a reduced daily calorie intake when HFSS advertising was restricted (reference 4) in the majority of countries restricting advertising there was little benefit (reference 5). It is interesting to note is that Spain has achieved some reduction in obesity levels between 2011 and 2019 of almost 4% in those children aged 6-9 years of age. It would be interesting to know how this is been achieved. The paper would be strengthened by more clearly defining the Spanish approach to advertising and promotion of unhealthy foods and how this differs from the approach taken by other European nations and the expected benefit. The final paragraph recognises the importance of a wide range of interventions running concurrently with advertising restrictions to tackle childhood obesity which is particularly important for preschool children who are less influenced by screen-based media than their older peers. There are a number of grammatical and spelling errors as a result of English not being a first language for these authors. The term HFSS F&B (High Fat Sugar Salt (HFSS) Food and/or Non-Alcoholic
	Beverages (F&B) requires explanation. Likewise PAOS Code requires explanation
	Reference *WHO EUROPEAN PEOPLE ARE REGIONAL OBESITY REPORT 2022 https://apps.who.int/iris/bitstream/handle/10665/353747/9789289057738- eng.pdf

REVIEWER	Reviewer name: Dr. Tony Waterston Institution and Country: Newcastle University Institute of Health and Society, United Kingdom of Great Britain and Northern Ireland
	Competing interests: None
REVIEW RETURNED	18-May-2022

GENERAL COMMENTS	There are a number of typos which should be corrected and also it
	would be valuable to have the article read by a native English

speaker as there are some idiomatic imperfections.
The authors describe legislation which may protect children from
junk food advertising. The following additional information would be
valuable:
1. is the food industry trying to oppose this legislation?
2. Have the food industry been involved in the drafting at all?
3. How will advertising on social media be controlled?
4. what kind of evaluation would be used to test the effectiveness of
the legislation?

VERSION 1 – AUTHOR RESPONSE

Editor Comments to Author: The authors would like to thank the Editor for his comments and proposals that have helped us to improve the manuscript. Reversing the order of the first two paragraphs would help the reader. Re: According to this comment the revised version includes a reversing order of the first two paragraphs. Paragraph 3, 1st sentence. I suggest deleting "and/or genetic". If genetics played a major role in obesity, one would not see the huge increase. Re: We agree with the Editor regarding the minor role of the genetic in the important increase of childhood obesity in the last decades. Accordingly, these words have been deleted (see the 3rd paragraph in the revised version). Avoid the use of the abbreviations High Fat Sugar Salt (HFSS) Food and/or Non-Alcoholic Beverages (F&B). It makes the paper harder to read Re: We have tried to avoid using abbreviations as much as possible. Those abbreviations mentioned by the Editor have been excluded in the revised version. Reviewer: 1 Dr. Simon Lenton Comments to the Author Advertising, obesity and child health: the case of Spain This is a very timely editorial coinciding, as it does, with the World Health Organisation publication on European Regional Obesity Report 2022*. Re: The authors would like to thank the Reviewer for the comments that have helped us to improve the manuscript. The paper briefly outlines the ill effects of obesity, the current levels in Spain, and outlines the advertising restrictions in Spain, the UK, Portugal, France and Sweden without reference to their impact on obesity. The evidence of effectiveness of "advertising bans" is poor-despite a systematic review suggesting a reduced daily calorie intake when HFSS advertising was restricted (reference 4) in the majority of countries restricting advertising there was little benefit (reference 5). Re: We agree with the Reviewer in the sense that "advertising bans" until now seems to achieve poor effectiveness, according to the available evidence. Nevertheless, most of advertising bans implemented until now do not prohibit all possible exposures addressed to children. Moreover, in most of the countries analyzed, companies participate in the evaluation and regulation of advertisements, and participation of companies is mainly voluntary. According to this comment, the revised version has been modified (see paragraph 8th in the revised version and also responses to Reviewer 2): "Eleven evaluation policies in 4 countries... Moreover, voluntary television marketing restrictions have been implemented in some countries, and studies show that television restrictions are generally not respected, as well as monitoring being challenging. 6 It is interesting to note is that Spain has achieved some reduction in obesity levels between 2011 and 2019 of almost 4% in those children aged 6-9 years of age. It would be interesting to know how this is been achieved. Re: According to this comment, a paragraph has been added trying to summarize the programs implemented in Primary Schools in Spain from the beginning of the last decade (see the last sentence, paragraph 3th in the revised version): "... 44.5% to 40.6%. The reduction is mainly attributable to overweight and not to obesity, and this achievement could be associated to programs implemented addressed specifically at this age group, the majority of them integrated in a national

strategy named NAOS (Nutrition, Physical activity and obesity prevention).1" The paper would be strengthened by more clearly defining the Spanish approach to advertising and promotion of unhealthy foods and how this differs from the approach taken by other European nations and the expected benefit. Re: The most important issue is that, in addition to adopting the Nutrient Profiling Model recommended by the WHO, it is a question of prohibiting the exposure of minors under 16 years of age to non-recommended profiles in all kind of media, that the participation of companies in the process is not only voluntary, and that there is an external evaluation and penalties. According to this comment, in the revised version we have tried to approach more in depth what are the specific characteristics of the current proposal for Spain comparing to the current situation and the situation of other European countries (see paragraph 13th, 6th sentence in the revised version): "The Spanish proposal bans advertising in all kinds of media, including TV, online platforms, influencers, and characters, aimed at children under 16y. Moreover, change the co-regulation and voluntary participation of the industry by an governmental external control with potential penalty effects is crucial. 2 They argue that the current rules on unhealthy food advertising are not going far enough to protect children... "The final paragraph recognises the importance of a wide range of interventions running concurrently with advertising restrictions to tackle childhood obesity which is particularly important for preschool children who are less influenced by screen-based media than their older peers. Re: Authors would like to thank the reviewer for this comment. There are a number of grammatical and spelling errors as a result of English not being a first language for these authors. The term HFSS F&B (High Fat Sugar Salt (HFSS) Food and/or Non-Alcoholic Beverages (F&B) requires explanation. Likewise PAOS Code requires explanation Reference *WHO EUROPEAN PEOPLE ARE REGIONAL OBESITY REPORT 2022

https://apps.who.int/iris/bitstream/handle/10665/353747/9789289057738-eng.pdf Re: A native English speaker revised the last version of the manuscript. The changes from the original version are expressed in the marked copy of the paper. Moreover, according to this comment and also a comment from the Editor in Chief, abbreviations HFSS and F&B have been excluded in the revised version and PAOS code meaning has been fully explained. On the other hand, the WHO European report 2022 has been added to the references (see the answers to a previous comment, and reference number 6). The Spanish acronym of PAOS has been included in the reviewed version of the paper. Reviewer: 2 Dr. Tony Waterston, Newcastle University Comments to the Author There are a number of typos which should be corrected and also it would be valuable to have the article read by a native English speaker as there are some idiomatic imperfections. Re: The authors would like to thank the Reviewer for his very important comments. Sorry for idiomatic imperfections; the revised version has been checked by a native English speaker. The authors describe legislation which may protect children from junk food advertising. The following additional information would be valuable: 1. is the food industry trying to oppose this legislation? Re: The current Bill was open to be discussed among civil society and organizations during November 2021. As an example, the Spanish Federation of Food and Beverage Industries pointed out that it shares the fundamental objective of guaranteeing the protection of minors, although it advocates to "reinforce and update the currently existing framework", that is, the PAOS Code. On the other hand, they warn that "applying a scheme or profile that stigmatizes certain groups or categories of food" [...] is not only disproportionate and contrary to the normal functioning of competition, but also discourages the reformulation and possible nutritional improvement of products by nullifying any incentive to improve their composition. They also point out the importance of the regulation adopted in Spain being in accordance with community regulations. Based on this comment, the industry would be interpreted

as only partially agreeing with the proposal, but we will have to wait and see what happens when the proposal will be finally approved and will become operational. According to this comment, a sentence has been added to the revised version (see the last sentence, paragraph 13th, in the revised version): "The current Spanish proposal was open to be discussed among the civil society and organizations, including food and beverage industries, despite the latter having only agreed partially with such proposal." 2. Have the food industry been involved in the drafting at all? Re: As it has been described previously, the bill was prepared by promoting the participation of all organizations, citizens, broadcasting companies and food companies. The answer to the previous question show, in part, that the food industry has been involved and has only partially agreed with the proposal. However, it will be necessary to evaluate the implementation and evolution in the medium and long term and check if this measure is more effective than those that have been taken to date (see also the next answers to this Reviewer). 3. How will advertising on social media be controlled? Re: The responsible of controlling the advertising in social media will be the competent authority for food safety and nutrition that will inform the National Commission of Markets and Competition, institution with penalties capacity. One of the most important changes in the proposal is the role of the government in control and that the role of industry will not only be voluntary. As of implementation, co-regulation will be complemented and the government will be responsible for control the process of advertising on social media. A paragraph in the revised version has been modified trying to more clearly explain the change (see paragraph 13th, 6th sentence in the revised version and the answers to Reviewer 1): "The Spanish proposal bans advertising in all kinds of media, including TV, online platforms, influencers, and characters, aimed at children under 16y. Moreover, change the co-regulation and voluntary participation of the industry by an governmental external control with potential penalty effects is crucial. 2 They argue that the current rules on unhealthy food advertising are not going far enough to protect children... " 4. what kind of evaluation would be used to test the effectiveness of the legislation? Re: Authors would like to thank the Reviewer for this specific question. The bill includes a specific analysis of the potential impact of the measures on child health, family, economy, etc, but does not provide a specific evaluation of the effectiveness of the proposed measures. This important limitation has been introduced in the revised version (see the second to the last sentence in the revised version): "Among the limitations of the Spanish proposal, it is worth mentioning the absence of a motion for a specific evaluation on the effectiveness of the measures. It would be advisable for the government to commission this evaluation to a consortium of research groups with expertise in this field

VERSION 2 – AUTHOR RESPONSE

Dear Editor,

We would like to thank the Editor for his review of our manuscript "Advertising, obesity and child health: the case of Spain". The new version of the manuscript includes the proposed corrections as well as the references to the legislations adopted in the European countries mentioned in the text. We have also modified the sentence that refers to the measures proposed in the UK trying to clarify the meaning: "The revised profile is more restrictive because resulted in fewer food and drinks passing the model in comparison with the 2005 NPM (difference of 8 percentage points). Unfortunately, to date, it was maintained a co-regulation with enterprises voluntary participation".

We hope that the manuscript will now be suitable for publication.

Thank you very much for your attention, we look forward to hearing from you.

Yours sincerely,

Luis Rajmil