**INTRODUCTION**

**Review question / Objective:** To conduct a systematic review of content analyses that investigate how food references are portrayed in audiovisual entertainment media. Frequency in which food references appear, proportion of low, middle and highly recommended consumption food references, contexts (positive, negative or neutral) in which the different type of food references appear - will be some of the aspects to explore.

**Rationale:** Worldwide obesity has become one of the most relevant health issues of the 21st century due to its prevalence, its increasing tendency and its associated
consequences. Urgent action is needed to address the problem. One of the potential factors that affects eating behaviour is media consumption. People spend a high portion of their daily time watching entertainment media what means, on one side, associated sedentarism and, from the other side, being continuously exposed to food references portrayed within these types of entertainment products. The latter includes not only commercial advertisements but also foods and beverages embedded in the audiovisual entertainment media. As previous experimental studies indicate that foods embedded in audiovisual entertainment media affects preferences, purchase intentions, choice and intake, it is relevant to analyse how food references are depicted in these audiovisual entertainment media.

**Condition being studied:** In this systematic review, the main domain being studied is the unit of analysis called “food references”. Food references could be defined as any visual, verbal or audiovisual food portrayals embedded in an audiovisual entertainment media (TV programmes, sitcoms, cartoons, movies, etc.).

**METHODS**

**Search strategy:** The following five databases will be used: Pubmed, Scopus, Embase, Web of Science and PsycINFO. Keywords will be based on category of product (food* OR drink* OR eat* OR beverage*), depiction (placement* OR embedded OR portrayal* OR depict* OR cue* OR reference* OR appearance*) and format (media* OR entertainment OR movie* OR cartoon* OR TV OR program* OR comedy OR series).

**Participant or population:** No restriction will be applied according to the target audience of the different entertainment media.

**Intervention:** As the study designs included in the systematic review are content analyses, this section is not applied.

**Comparator:** As the study designs included in the systematic review are content analyses, this section is not applied.

**Study designs to be included:** Content analyses. A content analysis is defined as a replicable, valid, and systematic technique for compressing multiple unit of analysis - in this case, food references - into fewer content categories depending on explicit rules of coding which have been set out in the method. It is useful to synthesis large volumes of data and make inferences from observed communications.

**Eligibility criteria:** The references of eligible articles will be also manually searched for further studies not identified.

**Information sources:** The five mentioned electronic databases will be searched.

**Main outcome(s):** As the included studies will not be experiments, no main outcome will be defined in terms of the latter methodology. However, search from different patterns will be carry out. For example: How often do food references appear? What type of food according to the level of healthiness is depicted more frequently? Are low recommended consumption food references more associated with positive contexts?

**Data management:** Records and data will be managed using Mendeley Desktop software. Articles data (title and abstract) will be imported to Mendeley Desktop in order to proceed with the screening phase. Full articles assessed for eligibility will be downloaded.

**Quality assessment / Risk of bias analysis:** The methodological quality of the full-texts studies will be assessed using the Mixed-Method Appraisal Tool. The following questions will be answered for each study: Is the qualitative approach appropriate to answer the research question? Are the qualitative data collection methods adequate to address the research question? Are the findings adequately derived from the data? Is the interpretation of results sufficiently substantiated by
data? Is there coherence between qualitative data sources, collection, analysis and interpretation?

**Strategy of data synthesis:** Qualitative data synthesis will be performed. A narrative summary of the findings from the included studies will be provided on a table structured around the following sections: Authors name and year of publication, type of entertainment media, targeted audience, sampling method, number of coders, intercoder reliability, proportion of low, middle and high recommended consumption food, description of the unit of analysis (how food references were coded) and main results.

**Subgroup analysis:** No subgroup analysis for meta-analysis will be performed. However, different patterns will be looked into to detect possible associations. For example, investigating whether the proportion of low recommended consumption food references vary depending on the target audience of the entertainment media (children vs. adults).

**Sensitivity analysis:** None.

**Language:** English and Spanish.

**Country(ies) involved:** Spain.

**Keywords:** Food references, entertainment media, content analysis, systematic review.

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