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Successful strategy to inform millennials about nutrition: the case of Carlos Ríos on Instagram

Estrategia exitosa de información sobre alimentación dirigida a 'millennials': el caso de Carlos Ríos en Instagram

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Abstract

Instagram has experienced remarkable growth worldwide over the past five years. The success of this social network is based on its use by younger age groups, the so-called millennials. Amongst their primary concerns are self-image and care for their bodies, both associated with health, food and nutrition. In the Spanish case, there is a nutrition specialist, Carlos Ríos, who has achieved prominence thanks to the success of his account on Instagram and the movement he has entitled *Realfooding*. The study presented here sought to identify the keys to content creation and network management that help explain the results obtained by this influencer. By way of content analysis of the 164 messages published in the first half of 2019 on his account, it can be seen that adaptation of language to the codes of the network, visualisation of the information by infographics and videos, humour, the use of references to of popular culture and the construction of a story with good and bad characters are some of the characteristics that define Ríos's successful style.

Keywords

Instagram; food; social networks; millennial; Carlos Ríos; influencer

Resumen

Instagram ha experimentado en los cinco últimos años un notable crecimiento en todo el mundo. El éxito de esta red social se cimenta entre los grupos de edad más jóvenes, los bautizados como *millennials*. Entre sus inquietudes destacan la propia imagen y el cuidado de su cuerpo, asociadas ambas con la salud, la alimentación y la nutrición. En el caso español, hay un especialista en nutrición, Carlos Ríos, que ha logrado sobresalir gracias al éxito en Instagram de su cuenta y del movimiento que ha bautizado como *Realfooding*. El objetivo de esta investigación es identificar las claves de creación de contenido y de gestión de la red que ayuden a explicar los resultados obtenidos por este *influencer*. Por medio del análisis de contenido de los 164 mensajes publicados en el primer semestre de 2019 en su cuenta, se constata que la adecuación del lenguaje a los códigos de la red, la visualización de la información a través de infografías y vídeos, el humor, el uso de referentes de la cultura popular y la construcción de un relato con buenos y malos son algunas de las características que definen el exitoso estilo de Ríos.

Palabras clave

Instagram; alimentación; redes sociales; *millennial*; Carlos Ríos; *influencer*

1. Introduction

General interest in food has significantly increased over the last few years (ComScore, 2018; Alzate-Narváez, 2013). Studies confirm this trend such as the project run by Dr Aranceta (2013, 2016), president of the Scientific Committee of the Spanish Community Nutrition Committee (SENC) and Vice-President of the Spanish Nutrition Academy (AEN). In addition to these studies and reports, various foundations, associations and societies promote research revolving around food, education regarding eating habits, making an impact in the media as a key vehicle to reach out to society and in relation to food in general, and certain health-related products in particular. This includes initiatives such as Nutrimedia, a website set up by the Barcelona Pompeu Fabra University Scientific Communication Observatory to analyse the degree of scientific confidence in these food and nutrition messages that appear in the media and on social media (Nutrimedia, 2017).

On an international scale, there is the White Paper on Food Safety (European Commission, 2000); chapter 7 is devoted to "consumer information", an aspect where the media plays a crucial role.

1.1. Information on food on the Internet

Professor Revuelta, researcher from the work group on the Quiral reports, revealed that from 2000 to 2009, the non-specialist Spanish press had published around 100,000 articles on health topics (2012). More than 10% of these articles had covered food and health issues.

This interest in food raises questions on how citizens access this information. On the whole, times have changed over the last two decades, and the Internet has become the most credible communication support, ousting conventional media such as the written press, radio or television. So, it has been seen that eight out of every ten internet users go online every day (INE, 2019). Their most frequent activities include reading the news, newspapers or current affairs magazines *online*, taking part in social media and looking for information on health topics (Fundación Telefónica, 2017:103- 104).

Food, specifically information related to cookery recipes, is an important ingredient of the digital transformation backed by the *The New York Times* in its digital version (Nafría, 2017:24). Within this high demand for information on health and food on the Internet, where the offer increases several times over, the quality of the information becomes more relevant (Prades, Farré and Gonzalo, 2014). This quality guarantee requires a study on the sources of information on food published in digital media because they have the strongest influence over the population. These sources focus on nutritionists or journalists specialising in food that have set up their blogs within the actual media, such as El Comidista, or bloggers and spokespersons on social media who have gained a reputation and credibility not only among their followers but also among actual journalists. The most noteworthy cases in Spain include Julio Basulto of juliobasulto.com (109,000 followers on Instagram, 107,087 followers on Facebook, 76,000 followers on Twitter), Aitor Sánchez of Mi dieta Cojea (251,000 followers on Instagram, 114,236 followers on Facebook and 75,700 followers on Twitter), Juan Revenga from El nutricionista de la General (21,800 followers on Instagram, 21,187 followers on Facebook and 53,700 followers on Twitter), Lucía Martínez from Dime qué comes (132,000 followers on Instagram, 71,878 followers on Facebook and 39,000 followers on Twitter), Carlos Ríos (1.4 million followers on Instagram, 191,611 on Facebook and 82,200 on Twitter) [1] and Miguel Ángel Lurueña from Gominolas de Petróleo (33,400 followers on Instagram, 30,826 followers on Facebook and 48,100 followers on Twitter) [2].

This is a recent phenomenon that requires new professional routines to be studied on how this type of information is drawn up plus analysis on how sources are treated in general, also focusing on open sources with no intermediaries between the experts and the citizens receiving that information.

1.2. Instagram, a growing social medium in Spain

Instagram is a social medium set up in 2010 as an application for iPhones that made it possible to share images to which users added different filters. Its success attracted the attention of Facebook which bought it in 2012 for one billion dollars. Its growth in Spain has been constant, with noticeable acceleration since 2015.

Consequently, in the report from the same year on social media that is published every year by the Interactive Advertising Bureau (IAB) (2015), the main association for the digital advertising and communication sector in Spain, 26% of surveyed users stated that they knew about and/or visited Instagram after Google+ and LinkedIn. Four years later, in the 2019 edition, the study shows that Instagram as a social medium has the second highest spontaneous recognition (69% of those asked, only exceeded by

Facebook, with 94%) (IAB, 2019).

Instagram is not only recognised, it is also used. In fact, some people define Instagram as the new social mediator within the media ecosystem (Martínez-Rolán, Tymoshchuka, Piñero-Otero and Renó, 2019). According to the IAB data (2019), 54% of users surveyed in Spain state that they use Instagram, which represented 49% more than the previous year. It is also the network which has seen the greatest increase in frequency of visits. Greater recognition and use of Instagram are mainly found among the young, female audience (16-30 years old). In fact, young women score this network most highly (8.1 points out of 10).

It is no coincidence that Instagram is the second most used social medium to follow influencers, understanding them to be Internet opinion leaders, and in particular, on social media, with the capacity to influence an increasingly broader community (Establés, Guerrero-Pico, Contreras-Espinosa, 2019: 220-221). Its adaptability as a platform for following influencers explains why Instagram is one of the main initiatives by a communicative model based on the power of what we see in photos and the emergence of a type of conversation based on portraits, selfies and videos (Quevedo-Redondo, Portalés-Oliva, 2017).

Nor does it seem to be coincidental that Instagram is the best-known network (89%) among professionals in the digital sector and the most used commercially (75%) (IAB, 2019). Consequently, 48% have increased advertising investment in this network. This commercial interest mainly comes in the form of contracting influencers. 70% of those asked state that their organisation has contracted services in Instagram from one of these profiles (the next most popular network is Facebook, at just 24%).

2. Aims and methodology

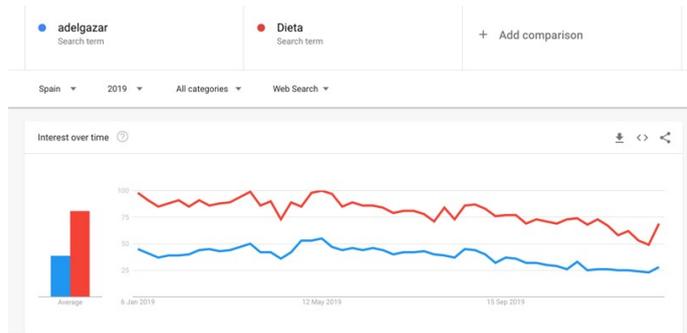
The growing demand for information on food on the Internet and on social media explains the interest in the study on which types of content are published and how they are put across. The strength of the Instagram network, its particular success among younger users (between 16 and 30 years old) or millennials (The Social Family, 2020) and the importance of image were also reasons that made this network a good study topic (Díaz-Bustamante-Ventisca and Llovet-Rodríguez, 2017: 81-82). Consequently, this research aims to identify the key aspects to creating content on nutrition in Instagram, and consequently take the work of nutritionist Carlos Ríos as the field of analysis, as his 1.4 million followers have made him a roaring success.

Carlos Ríos's account (@carlosriosq) was selected after initial filtering which identified the most outstanding figures within the field of nutrition on social media in Spain. This filtering combined the use of search engines, using the "Instagram" and "nutritionist" concepts and exhaustive monitoring of information on food and nutrition from the main digital newspapers throughout 2018, where most nutrition experts appear as a source of information or feature in the news item. This first selection compiled the following names: the aforementioned Carlos Ríos, Aitor Sánchez (@Midietacojea), Lucía Martínez (@dimequecomes), Julio Basulto (@juliobasulto_dn), Gabriela Uriarte (@gu_nutricion), Juan Revenga (@juan_revenga), Virginia Gómez (@dietistaenfurecida), Miguel Ángel Lurueña (@gominolasdepetroleo), Victoria Lozada (@nutritionisthewblack) and Juan Llorca (@juanllorca).

Although the selected nutritionists will be analysed at a later date within the research project associated with this paper, Carlos Ríos was chosen for this analysis for two reasons. Firstly, because, despite being present on other social media such as Twitter, Ríos has based his recognition on the work he does on Instagram. Secondly, thus prioritising of Instagram has been rewarded by undeniable success in terms of the number of followers he has gained. Carlos Ríos's Instagram account thereby had 1.3 million followers at the start of November 2019. This data is even more astounding if we consider that his numbers practically tripled in a year, as in December 2018, he had a mere half a million followers.

The sharp rise in the number of followers in 2019 was the reason for choosing that year as the study timescale. Specifically, the first semester was selected, from 1 January to 30 June. As shown by Google Trends, the Google tool that plots how searches for a particular concept evolve, the greatest rate of searches in Spain that included the terms "diet" and "weight loss" took place in January and May 2019 (Graph 1). January is also the month when Christmas excesses demonstrate harmful health effects (Vedel-Krogh, Kobylecki, Nordestgaard and Langsted, 2019).

Graph 1: Interest in Google searches in Spain for the terms “diet” and “weight loss” (2019)



Source: Google Trends

This goal aims to answer the research questions given below:

RQ1. Which food-related terms appear most frequently on Carlos Ríos's account?

RQ2. What is the presence of personal content?

RQ3. What is the quantitative importance of the promotion content of his personal brand? Does the promotion extend to commercial products or companies?

RQ4. What visual content does Carlos Ríos use in his account and what is used the most?

RQ5. Which topic-based and stylistic characteristics in his messages get Carlos Ríos the most “likes” and the most comments from his followers?

The study on Carlos Ríos's Instagram account was based on applying content analysis, using quantitative and qualitative techniques (Bailey, 1993; Jensen and Jankowski, 1993; Bardin, 2002). After evaluating the analysis sheets used in previous research on Instagram in fashion (Segarra-Saavedra and Hidalgo-Morí, 2018) and political communication (Quevedo-Redondo and Portalés-Oliva, 2017) and checking the method used in the few similar research projects in the field of nutrition (Inan-Erokglu and Buyuktuncer, 2018), a research analysis sheet was designed determining six variables: date; number of “likes”; number of comments; type of image; predominant topic of the message and style of the message.

The interest in compiling the number of “likes” and the number of comments, both clearly quantitative, is related to the engagement concept, which is increasingly relevant on social media and in the conventional media. This concept of engagement refers to a hook, commitment, implication, participation or interaction. The breadth and ambiguity of its meaning and interpretation is also expressed by academic literature which states that it is not possible to have a clear conceptual framework or a structure of the generally accepted term (Ganga-Contreras, Navarrete, Rodríguez-Ponce and Veliz-Burgos, 2018; Moreno and Fuentes, 2019:51-52). Despite this, and from the marketing perspective, engagement is associated with a new model founded on valuable relations based on intense and interactive activities that take place in the co-creation processes between clients, communities, brand and company (Brodie, Hollebeek, Ilic and Juric, 2011; Vivek, Beatty and Morgan, 2012). In the case of Instagram, the most obvious and quantifiable materialisation of interactivity and co-creation between followers and the person being followed lies in the number of ‘likes’ and the number of comments. This is defended by Díaz (2017) when explaining how to measure the level of engagement for influencers on social media.

Different values have been set for the latter three variables. In the case of the type of image, the values are:

a) Infographics

b) Video

c) Photography. This includes stills, photo montages (when several images are added or superimposed to create an unreal image) and photos of dishes and cookery preparation.

d) Screen shots (tweets, Facebook or Instagram messages)

In the predominant style of the message (as there might be more than one style trait present), the values are:

- a) Argumentative: the message uses arguments (standards, research, statements from other experts, etc.) to justify a certain position, for or against, on a controversial issue linked to food.
- b) Advisory: the message offers advice on a food-related custom, practice or behaviour.
- c) Didactic: the message explains complex concepts and questions related to nutrition.
- d) Discursive: the message puts across an opinion expressed in a style close to the political discourse or pep talk on a matter linked to nutrition.
- e) Accusatory: the message claims to complain about behaviour, an attitude or a measure that the author considers contrary to a good diet.
- f) Humour: the message uses humour to put the message across.
- g) Narrative: the message is explicitly aimed at whoever is reading, uses familiar forms of address.

As far the content of each message is concerned, the following values have been set:

- a) Healthy diet: the message content puts across a message in favour of healthy eating.
- b) Ultra-processed or not particularly healthy food: the message identifies ultra-processed products, reports their sale or dissuades readers from eating them.
- c) Recipes: the message describes dishes prepared or tasted by the person writing it.
- d) Promotional: the message seeks to promote some kind of achievement, job or milestone for the person starring in the Instagram account or somebody who they value, or a company, institution or entity.
- e) Personal: the message reflects the mood or asks questions related to its author's personal life that has little or nothing to do with nutrition.

Data collection for the aforementioned six variables has been complemented by observation work which attempted to compile information that cannot be categorised but that provides an essential perspective to meet the aim of this research.

The number of messages analysed in the study period was 164 (Table 1)

Table 1: Monthly distribution of messages published by Carlos Ríos on Instagram during the first semester of 2019, number of 'likes' and number of comments.

Month	Number of messages	Number of 'likes'	Number of comments
January	41	696,240	33,262
February	26	485,700	18,124
March	24	577,100	104,211
April	27	480,590	92,237
May	29	622,900	32,787
June	17	359,200	9,731
Total	164	3,221,730	290,352

Source: own work

3. Results

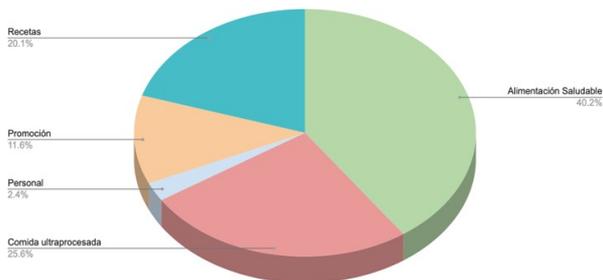
3.1. Topics, style and type of images

Information intending to encourage and promote healthy eating is the type of predominant content in the study period (graph 2). Four out of every five messages analysed falls within this topic. Related to this active defence of healthy food, there are 33 messages that offer users recipes (20% of the total), a type of content that stands out for its relevance and specific nature.

One of Carlos Ríos's defining traits is his particular crusade against ultra-processed food. The importance that he gives to eradicating or reducing the consumption of these products is reflected in the 42 messages

(25.9%) that focus on discrediting, advising against or warning about their consumption, and on unhealthy remedies to lose weight (inappropriate diets, detox shakes, etc.).

Graph 2: Distribution of message topics



Source: own work

Alongside food and his fight against ultra-processed products, Carlos Ríos's Instagram account has a third reference point which is promotional messages. 12% of the messages analysed (19 out of 164) fit this category. This promotion work includes references to his own Instagram account on other social media; to his own participation as a specialist in other media, particularly television; to the publication of his book *Come comida real: una guía para transformar tu alimentación y tu salud* (Eat real food: a guide to transform your eating and your health) and other people's promotion. The latter encompasses four sponsored messages, appearing in this way, from three different companies: an insurance company, a small appliance manufacturer and a company that sells red berries (figure 1).

Figure 1: Example of sponsored content



Source: @carlosriosq

As far as style is concerned for the texts that Ríos uses to put across his messages on Instagram, the systematic use of an informal register stands out, aimed at an audience that is used to a fresher way of communicating, less stiff than might be found in conventional media and a far cry from dense, flat writing. There are many touches of humour with continual references to cultural products that are known and shared by his followers (television programmes, series, films, songs, etc.); familiar language; colloquial, even sometimes vulgar language; the constant use of emojis and emoticons; the abundance of exclamation marks and the abundance of qualifying adjectives. He thereby uses a combination of humour, information, affiliation and preaching to reach his followers.

If the predominant tone of each message is taken as a reference, this general outlook is expressed in the balanced distribution between entertainment, including performance, and nutritional information. As reflected in table 2, out of the 164 messages studied, 35 (21.3%) feature a style associated with giving advice on better eating, understanding 'advice' to be as defined by the Cambridge Dictionary as "an opinion that someone offers you about what you should do or how you should act in a particular situation." The texts in 34 (20.7%) of the messages have been catalogued as didactic. Their style is associated with the

idea of teaching or instructing, and this is what characterises the recipes offered by Carlos Ríos on his account. In a similar number of messages to the previous two categories, 31 (18.9%) on this occasion, humour is the main stylistic trait to put across the message.

In 24 (14.6%), the text has been catalogued as discursive, meaning that it is thought to express a doctrine, ideology, thesis or point of view. 23 (14%) of the 164 messages have been defined as argumentative. Their tone is aimed at reflecting reasoning to prove or demonstrate a proposal, to convince readers about what is being stated or denied.

There is less obvious presence for 13 (7.9%) messages where the main style has been defined as accusatory, meaning a style focussing on declaring the illegal, irregular or inconvenient status of something (figure 2).

Figure 2: Example of a message with a complaint style



Source: @carlosriosq

Finally, in just four messages (2.5%), the main style trait is narrative, identified as one which explicitly reaches out to the message recipient.

Table 2: Distribution of the messages according to the predominant style

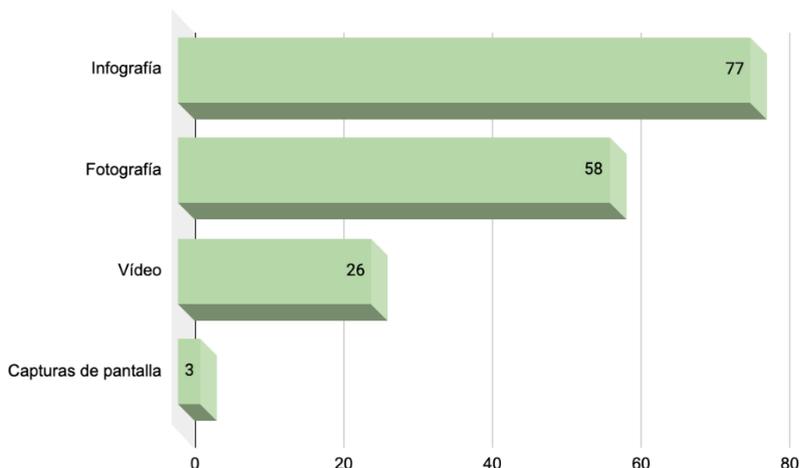
<u>Style of the message</u>	<u>Number of messages</u>	<u>Percentage</u>
Advisory	35	21.3
Didactic	34	20.7
Humour	31	18.9
Discursive	24	14.6
Argumentative	23	14.0
Accusatory	13	7.9
Narrative	4	2.4
Total	164	100.0

Source: own work

The style traits and tone of the text add to and strengthen the message that is expressed by the image. Considering the importance of visuals on social media like Instagram, the messages have been classified according to the type of visual content used.

As opposed to what happens with the style and tone of the textual message, where there is greater diversity and greater distribution of the different types, meaning that no one type particularly stands out, in this case, there is a resource that emerges over the rest (graph 3) and this is infographics, understood to be a graphic representation that combines text and image for the purposes of providing information.

Graph 3: Visual formats used in the messages



Source: own work

So, almost 50% of the messages being analysed include infographics. All of them maintain the same visual style and the same purpose, comparing healthy food and harmful products. In a single window or as a drop-down infographic, parts of which can be seen when you click on the arrow on the right hand side, they appear with a white background and a coloured box depending on whether this refers to healthy products (green), what Ríos calls good processed foods (ochre) or ultra-processed foods (orange). Inside the boxes, Ríos includes outlined images of the products and minimum textual information (figure 3).

Figure 3: Example of infographics design



Source: @carlosriosq

In order of numerical relevance, the second most used format is photography, appearing in 35% of the messages (58). Just under half of these photos, 23 to be precise (14% of total messages) are close-ups that illustrate the results of recipes suggested by Carlos Ríos on his channel.

Video appears in 26 messages (15.8%). Ríos, evidently familiar with the use and consumption codes of this social medium, often uses gifs, very short funny videos that repeat in a loop, or videos made by other users or by his followers or friends. Any made by him or in which he stars are recorded amateurly, with a look that is a far cry from professional audiovisual standards which, on the other hand, make him seem more approachable and real.

Alongside the humorous tone of his gifs, photo montages are also used, generally images of television

programmes in which Carlos Ríos's face is inserted. This type of visual resource, falling within the Photography variable, occurs on 15 occasions (9%).

Finally, the use of screen shots is anecdotal, showing the content of a tweet or a message published on other social media. This only happens on 3 occasions.

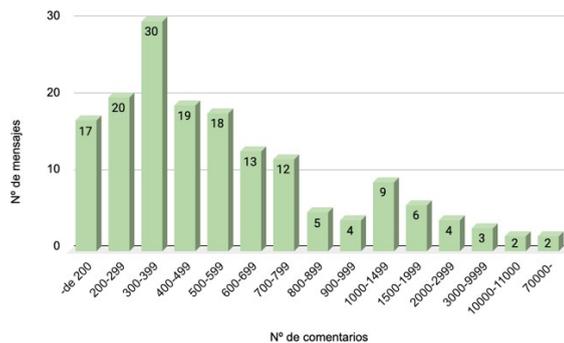
3.2. Engagement

During the six months of the study, Carlos Ríos published 164 messages on Instagram, slightly more than 27 per month. In terms of engagement, he received a high degree of interaction from his followers. So, in this semester he tots up slightly more than 3.2 million 'likes', representing an average of almost 20,000 per message and 290,352 comments, in other words, an average of 1,770 per message.

The distribution of the 'likes' is generally uniform throughout the messages. So, 85% range between 10,000 and 30,000 'likes': almost 55% of the messages (88) get between 10,000 and 20,000 likes and 30% (48) between 20,000 and 29,999. Out of the remaining 15%, 5% have less than 10,000 and 10% (17) have more than 30,000.

If the number of comments is taken as a reference, the range is significantly greater, as shown in graph 4. A little over half, 52.4%, 86 messages, receive under 500 comments; 25%, 42, have between 500 and 1000 comments and in the remaining 24 (14.6%), there are enormous differences (from more than 1,000 comments up to nearly 80,000 that Carlos Ríos achieved in his most commented messages).

Graph 4: Number of comments that the messages receive



Source: own work

3.2.1. 'Likes'

Regarding the content and style of the messages that receive the most 'likes', it should be highlighted that the two that achieve the highest number (65,000 and 54,000 respectively) are marked by two similar characteristics, they are both videos and they both try to raise a smile. In the first, the video is a routine by a young comic, identified by Carlos Ríos as his friend, who jokes about the flavour of healthy products such as oats.

The second is a dance routine recorded on Tik Tok, a Chinese app which has become a roaring success among young people, where Carlos Ríos himself appears promoting when he calls the "mango challenge". In fact, it is an invitation for his community of followers to imitate him. The phrase that he uses reveals the successful style that marks Carlos Ríos's work on Instagram: "Challenge your friend to do the #MangoChallenge and lose the little dignity us *realfooders* have left". The video was watched 630,000 times.

The third with the most 'likes' (45,100) is an accusatory message which criticises the food industry and the Government for making healthy products so expensive and ultra-processed products so cheap. To do this, it makes a comparison using a drop-down infographic comparing the prices of a packet of biscuits compared to some pistachios, a burger compared to some cranberries and a bottle of sunflower oil compared to a bottle of olive oil.

The five most 'liked' messages by Carlos Ríos not only include humour and complaints but also specifically promote his work. On the one hand, he gets more than 43,000 'likes' with a message in which he

announced the prize draw for healthy or what he calls *realfooder* products. He launched this to celebrate that his Instagram account had reached 700,000 followers. And what did the people taking part have to do? Make his engagement grow.

How? He explains it himself in the message. They must: a) follow his account, b) 'like' the publication (which explains its high number of 'likes') and c) mention a friend in the comments "so that they can escape from the *Matrix*".

Matrix, a key concept for Carlos Ríos, also appears in the fifth message with the most 'likes' (42,100). To mark the publication of his book *Come comida real: una guía para transformar tu alimentación y tu salud* (Eat real food: a guide to transform your food and your health), Ríos makes the most of some messages to promote it explicitly. In this case, he uses a discourse in which, after the most emotional and personal part that includes an extensive dedication to his deceased grandmother, he highlights the success of his work despite the pressure that he says that he suffers from that dark conglomerate of institutions and food industry that he calls *Matrix*.

Among the five with the least 'likes' in the study period (ranging from 5,600 to 6,400 likes), three are focussed on criticising ultra-processed food or diets and inadvisable remedies, and two refer to healthy food.

3.2.2. Comments

If the five messages with the greatest number of comments in the study period are taken as a reference, several elements stand out. The first is that the two messages with the highest number of comments, and with almost eight times more (79,900 and 79,800) than the third on the list (10,900) are related to promoting the actual author. In both cases, the hook is similar, winning a modest prize (the book written by Ríos and that he is promoting in the study period, entitled *Come comida real: una guía para transformar tu alimentación y tu salud*, and a 'realfooder' chocolate spread) by means of a competition or a prize draw. In one way or another, the procedure set out by Ríos is similar with the same purpose: strengthen loyalty, commitment or engagement statistics for the Instagram account. It thereby sets the condition of following his account or similar accounts and mentioning a friend and/or 'liking'.

The second outstanding element is that, out of the five messages with the highest number of comments, four of them use humour as the communication tool: two of them use videos (one starring someone who is not Carlos Ríos and another featuring a dance by Ríos himself using the Tik Tok app) and another two have photo montages that include his face on an image of the TV programme presenter from *First Dates* (figure 4) and another where he works himself into the Sponge Bob Square Pants cartoon.

Figure 4: Example of message with a humorous tone



Source: @carlosriosq

The third relevant characteristic is that it is hard to draw strong parallels between the messages with the most comments and the messages with the most 'likes'. Out of the five with the most comments, three coincide with the most 'likes'. Two do not.

At the other extreme, out of the five messages with the lowest number of comments (56 to 119), none of them is a video, none features humorous content, and none seeks to promote the author directly. Three of them are recipes, one is a criticism of miracle diets and detox shakes and another is a comparison of three products with the same base (in this case, banana) in three versions: real, minimally processed and ultra-processed.

4. Discussion and conclusions

The increase in the demand for information on food and nutrition, meaning on what is eaten, how it is consumed and on the effects of this consumption on health, and also on the environment, is reflected on social media, in journalism (Molyneux and Holton, 2015) and in other fields of communication. In this research, the focus of interest has centred on a specific network, Instagram, that stands out for its strong growth in Spain and its greater penetration among younger age ranges (IAB, 2019, The Social Media Family, 2020).

Based on the data that was compiled and analysis of the 164 messages published by the nutritionist Carlos Ríos in the first semester of 2019, it is clear that his Instagram account (@carlosriosq) is aimed precisely at this age group, very much his own age range (he was born in 1991, meaning that, at the time of writing this article, he is 28 years old). This explains how his messages take on board and put across the defining language characteristics used on social media: informal style, combination and change of register, not even needing a transition (colloquial, formal, emotional, activist, ironic, sentimental), use of emojis, inclusion of hashtags, links and mentions. This observation follows previous lines of research on Instagram (Segarra-Saavedra and Hidalgo-Marí, 2018) and represents one of the keys to his success.

However, in the case of Instagram, although the text in the messages is relevant, the image used alongside it is even more so. Let's not forget that Instagram was created as a photo-sharing application. Carlos Ríos is very aware of this fact. In this aspect, and in answer to the fourth research question in this project (RQ4) focussed on the most relevant visual elements, the most remarkable and stand-out trait when compared with other nutritionists (Marauri, Rodríguez-González, Marín-Murillo and Armentia-Vizuet, 2019) is his frequent use of infographics as a visual and informative resource. Carlos Ríos has a clear objective here: unity of style and simplicity. All his infographics follow a similar pattern: use of colours to identify at a glance the goodness (green for natural *realfooder* or yellow for minimally processed) or the harm (orange for ultra-processed or *fakefooder*), barely any text and a clear message. This helps him put across an unambiguous message, quickly consumed and yet useful, all characteristics that, in addition to being a perfect fit for the so-called attention economy, also encourage loyalty among an audience that is used to instant mass consumption of information through a mobile device, and who are grateful for a simple guide to good eating. It is not by chance that, after his success on Instagram, Carlos Ríos has set up an app, with a similar lay out of infographics that, among other functions, helps you recognise whether a product is *realfooder* or *fakefooder*.

Video is another visual resource used frequently and successfully by Carlos Ríos. As the study has shown, much of the content which achieves the greatest engagement makes use of a video to illustrate the message. And in this message, the technical quality of the video is not particularly relevant. Just like his users, Ríos uses gifs found on the web, videos recorded by his followers or videos he has recorded himself with barely any editing and a nonprofessional technical execution to nod to, warn and hand out tips to his followers. These are the cases that best demonstrate Ríos's ingenuity and particularly his sense of humour and it seems that, based on the 'likes' and the comments, he manages to connect with his followers. Humour is another of his identifying traits: youthful, casual humour peppered with well-known and recognisable TV, cinema and leisure references where Ríos does not mind laughing at himself and at the *realfooder* movement that he created (jokes associated with '*Realfooder Tinder*' as a parody of the successful dating app, or the dance with the Tik Tok app, very well-known and much used among teens and young people, are a good example of this).

Precisely, and in consonance with this idea of promoting a movement, Carlos Ríos is also successful in his use of the storytelling technique (Rodríguez-González, Marauri and Cantalapiedra-González, 2013; Castelló-Martínez, del Pino-Romero and Tur-Viñes, 2016) to create a story that binds his followers together, a story that demonstrates continuity and presence over the six months that the study lasted and that structures his Instagram account. In this story, this tale, there are good guys, his followers and himself, who work hard and fight the dark forces identified with the *Matrix* metaphor. *Matrix*, the title of the successful sci-fi film trilogy directed by the Wachowski brothers between 1999 and 2003, paints the picture of a dystopian society where human beings live a life that is not real and this reality is much worse that they believe.

That idea, almost heroic, of fighting a powerful, hidden enemy, along with the message that there is a numbed, misled society that they have to help, also explains the frequency of messages with a discursive, emphatic and occasionally pompous tone, that uses extensive texts to mark a network that is paradoxically characterised by the opposite.

Matrix is also used to answer the first research question (RQ1), regarding which topics are linked to food that appear most frequently in the period being studied. They are used because, in the case of Carlos Ríos, *Matrix* is a metaphor for fighting a type of food whose synecdoche is ultra-processed food. These are the

focus of one in every four messages analysed. Its relevance in the content and in the general discourse by Carlos Ríos is undeniable, just like his healthy food initiative, which he has named *Realfooding*. 40% of the messages are explanations concerning *Realfooding*, which guidelines to follow to form part of the movement and what alternatives it offers compared to ultra-processed food. This idea is strengthened by the recipes (20% of the messages) that, in line with the targeted follower's style and profile, are characterised by their simplicity and straightforwardness.

In answer to the research question (RQ5) on the characteristics and the style that help Carlos Ríos to get more 'likes' and comments from his followers, a regular pattern has emerged. This pattern is marked by adaptation to web language, the use of simple and effective content, maintaining the style unit, skilful use of humour and creating his own universe with a story of good guys and bad guys. Combining these elements brings about a high level of interaction with the users.

And this level of interaction can also be seen in the transformation of the *realfooder* movement into a *realfooder* community. Creating a community requires dialogue, experience, the feeling of a personal relationship and having an emotional link that you know is shared with others (Marauri, Pérez Dasilva and Rodríguez, 2015) and that you wish to broaden further. Consequently, Ríos invites his followers to spread the idea of a movement that makes them participants, even disciples. In fact, consumption of a certain product becomes the identity sign of this community. This is the case of edamame, a product for which Carlos Ríos has become the main promoter and whose stocks have run out in the supermarkets. In fact, he includes a message with a screen shot that shows a *whatsapp* conversation with a representative from the Mercadona chain enquiring about this low stock issue. His book, and the queues that form to attend his presentation, that he records and publishes on the web, are two further examples of creating this community. Both are examples that the engagement that Carlos Ríos manages to generate with his followers goes beyond 'likes' and comments and is connected to a wider, more ambitious understanding of the concept reflected in different authors (Brodie et al., 2011; Vivek et al., 2012; De Veirman, Cauberghe and Hudders, 2016; Ganga-Contreras et al., 2018; Moreno-Fernández and Fuentes-Lara, 2019)

Halfway between personal opinion (or interest) and professional career, there are messages directly associated with promoting Carlos Ríos's work, or promoting third parties, contents concerning the third research question (RQ3). This function marks and defines the character of this social medium as a platform to find out about and acknowledge the work of its author, something similar to Twitter in the case of communication professionals (Marauri, Cantalapiedra and Álvarez, 2018; López-Merí and Casero-Ripollés, 2017; Brems, Temmerman, Graham and Broersma, 2017). It also defines the influencer figure, a role that appears to be associated, although not exclusively, with social media, particularly Instagram, and with fashion (Segarra-Saavedra and Hidalgo-Marí, 2018; Castelló- Martínez et al., 2016; Establés, Guerrero-Pico and Contreras-Espinosa, 2019).

In the case of Carlos Ríos, his book takes up a large share of analysed contents related to promoting his own personal brand, Carlos Ríos, and his movement, *Realfooding*. This promotion task includes prize draws and competitions that he organises (where he asks the contestants to promote and increase their interaction with his website) and that achieve a high rate of interaction, and the sponsored contents, meaning contents that have been sponsored by a brand. Although they appear marked and identified as such and they do not seem to affect Carlos Ríos's credibility in his community, other contents have been detected in the study period where a commercial brand is explicitly seen to visually flaunt the suitability of consuming a certain product without referring to possible sponsorship. In these cases, critical comments arise although, over the period being studied, Ríos uses various messages to emphasise that when he promotes a product through sponsorship, he is always upfront about it.

The outcomes were also able to answer the research question (RQ2) on the presence of personal content. His use of anecdotes is surprising (2.5% of the total). It is surprising because if anything characterises social media in general and Instagram in particular, it is the blurring of borders between personal and professional spheres (Marauri et al., 2018) and choosing to show a more intimate and personal side (Quevedo-Redondo and Portalés-Oliva, 2017).

In summary, this paper has made it possible to partially meet the set goal, to identify the key aspects of the information on food in Instagram by means of analysing the account of the most successful nutritionist on this network in Spain. Assuming the language of this network (informal, youthful, direct, using emojis and hashtags) is one of them. The use of visual resources that go beyond conventional photography (photo montages, gifs, video and infographics) also fits here. Both textual and visual resources help to effectively put across a message in favour of healthy eating. The third and fourth key aspects are the use of humour and developing a story peppered with popular culture references that encourage followers to form part of the community of the good guys (*realfooders*) against the bad guys (*Matrix*). These results represent partial proof of the set goal. Consequently, we should follow this path by analysing similar accounts and

profiles to check the generalisation of the identified key points. This content analysis could be complemented with research based on in-depth interviews with the most outstanding nutritionist on Instagram and on other major networks to thereby achieve a more qualitative vision that would enrich knowledge on a growing phenomenon.

5. Biographical references

- [1] Alzate-Narváez, T. (2013). Consejos dietéticos y nutricionales en la prensa española. *Comunicación en Salud*, 4(1), 17-26. <https://bit.ly/2K1Zu1P>
- [2] Aranceta, J. (2013). *Nutrición Comunitaria*. Barcelona: Elsevier Masson.
- [3] Aranceta, J. (2016). *Periodismo y alimentación. Influencia de los medios en la elección de alimentos y en los hábitos de consumo alimentario*. Leioa: Universidad del País Vasco. <https://bit.ly/2KpxWUq>
- [4] Bailey, K. (1993). *Methods of Social Research* (2nd ed). New York: The Free Press.
- [5] Bardin, L. (2002). *El análisis de contenido*. Madrid: Akal.
- [6] Brems, C.; Temmerman, M.; Graham, T. & Broersma, M. (2017). Personal branding on Twitter: How employed and freelance journalists stage themselves on social media. *Digital Journalism*, 5(4), 443-459. <http://doi.org/gf8mfv>
- [7] Brodie, R.; Hollebeek, L. D.; Ilic, A. & Juric, B. (2011). Customer Engagement: Conceptual Domain, Fundamental Propositions and Implications for Research. *Journal of Service Research*, 14(3), 252-271. <http://doi.org/db9zq2>
- [8] Castelló-Martínez, A.; del Pino-Romero, C. y Tur-Viñes, V. (2016). Estrategias de contenido con famosos en marcas dirigidas a público adolescente. *Revista ICONO14 Revista Científica De Comunicación Y Tecnologías Emergentes*, 14(1), 123-154. <http://doi.org/dr22>
- [9] European Commission (2000). *Libro blanco sobre seguridad alimentaria*. <https://bit.ly/2yeXSix>
- [10] ComScore (2018). El sector de la alimentación online en Europa. <http://bit.ly/2VvfNJU>
- [11] De Veirman, M.; Cauberghe, V. & Hudders, L. (2017). Marketing through Instagram influencers: the impact of number of followers and product divergence on brand attitude. *International Journal of Advertising*, 36(5), 798-828. <http://doi.org/gf3gkr>
- [12] Díaz, L. (2017). *Soy marca. Quiero trabajar con influencers*. Barcelona: Profit Editorial.
- [13] Díaz-Bustamante-Ventisca, M. & Llovet-Rodríguez, C. (2017). Empowerment or impoverishment of children from social networks? Perceptions of sexualized images of girls in Instagram. *El profesional de la información*, 26(1), 77-87. <http://doi.org/drzb>
- [14] Establés, M. J.; Guerrero-Pico, M. y Contreras-Espinosa, R. S. (2019). Jugadores, escritores e influencers en redes sociales: procesos de profesionalización entre adolescentes. *Revista Latina de Comunicación Social*, 74, 214-236. <http://doi.org/djs9>
- [15] Fundación Telefónica (2017). *Sociedad digital en España*. Madrid: Ariel. <https://bit.ly/2wBULRr>
- [16] Ganga-Contreras, F.; Navarrete, E.; Rodríguez-Ponce, E. y Veliz-Burgos, A. (2018). Nuevos enfoques organizacionales: adyacencia teórica-conceptual al engagement y la co-creación. *Revista Espacios*, 39(45). <https://bit.ly/2VmUXfT>
- [17] IAB (2019). *Estudio anual de redes sociales*. <https://bit.ly/2R4t9M4>
- [18] IAB (2015). *Estudio anual de redes sociales*. <https://bit.ly/2u5FVB8>
- [19] Inan-Eroglu, E. & Buyuktuncer, Z. (2018). What images and content do professional dietitians share via Instagram? *Nutrition & Food Science*, 48(6), 940-948. <http://doi.org/ggbg7b>
- [20] Instituto Nacional de Estadística (National Statistics Institute) (2019). Encuesta sobre equipamiento y uso de tecnologías de información y comunicación en hogares. <https://bit.ly/2xfLpvh>
- [21] Jensen, K. B. & Jankowski, N. W. (1993). *Metodologías cualitativas de investigación en comunicación de masas*. Barcelona: Bosch.

- [22] López-Meri, A. y Casero-Ripollés, A. (2017). Las estrategias de los periodistas para la construcción de marca personal en Twitter: posicionamiento, curación de contenidos, personalización y especialización. *Revista mediterránea de comunicación*, 8(1), 59-73. <http://doi.org/djt8>
- [23] Marauri, I.; Cantalapiedra, M. J. y Álvarez, C. (2018). Blog y Twitter, la combinación perfecta del comunicador digital. Los casos de Ignacio Escolar, El Comidista y Mi mesa cojea. *El Profesional de la Información*, 28(2), 349-358. <http://doi.org/djtb>
- [24] Marauri I.; Pérez-Dasilva JA.; Rodríguez MM. (2015). La búsqueda de la comunidad de marca en las redes sociales. Los casos de Telepizza, Vips y Burger King. *Trípodos*, 37, 133-149. <https://bit.ly/3b50EFS>
- [25] Marauri, I.; Rodríguez-González, MM.; Marín-Murillo, F. y Armentia-Vizuet, I. (2019). Instagram y la información sobre nutrición en España. In K. Meso-Aierdi; S. Peña-Fernández y A. Larrondo-Ureta (Eds.), *Nuevos actores y estrategias en el espacio mediático compartido* (pp. 205-222). Bilbao: Servicio Editorial de la Universidad del País Vasco.
- [26] Martínez-Rolán, X.; Tymoshchuka, O.; Piñero-Otero, T. y Renó, D. (2019). Instagram como red de promoción e hipermediación del turismo rural: el caso de Aldeias Históricas. *Revista Latina de Comunicación Social*, 74, 1610-1632. <http://doi.org/djtk>
- [27] Molyneux, L. & Holton, A. (2015). Branding (health) journalism: Perceptions, practices and emerging norms. *Digital journalism*, 3(2), 225-242. <http://doi.org/djvc>
- [28] Moreno-Fernández, Á. y Fuentes-Lara, M. C. (2019). 'Engagement' y redes sociales. Análisis bibliométrico desde el ámbito científico de las relaciones públicas. *Trípodos*, 45, 49-72. <https://bit.ly/3epkWM6>
- [29] Nafria, I. (2017). Los usuarios, en el centro de la estrategia de los medios. *Revista Telos*, 108, 22-24. <https://bit.ly/2yT7fVz>
- [30] Nutrimedia (2017). La nueva web Nutrimedia ofrece análisis científicos de mensajes sobre alimentación y nutrición. <https://bit.ly/2yaxQgE>
- [31] Prades, J.; Farré, J. & Gonzalo, J. L. (2014). Journalists and bloggers. Professional identities and practices in food risk/benefits communication in Spain. *Communication & Society /Comunicación y Sociedad*, 27(1), 1-21. <https://bit.ly/2JWxD3h>
- [32] Quevedo-Redondo, R. y Portalés-Oliva, M. (2017). Imagen y comunicación política en Instagram. Celebriificación de los candidatos a la presidencia del Gobierno. *El profesional de la información*, 26(5), 916-927. <http://doi.org/drv3>
- [33] Revuelta, G. (2012). Salud en España durante el período 2000-2009: aproximación a través del análisis de la prensa. *Medicina clínica*, 138(14), 622-626. <http://doi.org/crr5hm>
- [34] Rodríguez-González, M. M.; Marauri-Castillo, I. y Cantalapiedra-González, M.J. (2013). La política de comunicación proactiva de las instituciones públicas para combatir crisis. *Revista Latina de Comunicación Social*, 68, 457-484. <http://doi.org/djtg>
- [35] Segarra-Saavedra, J. e Hidalgo-Marí, T. (2018). Influencers, moda femenina e Instagram: el poder de prescripción en la era 2.0. *Revista Mediterránea de Comunicación*, 9(1), 313-325. <http://doi.org/dr2n>
- [36] The Social Media Family (2020). VI Estudio sobre los usuarios de Facebook, Twitter e Instagram en España. <https://bit.ly/2xw8QQU>
- [37] Vedel-Krogh, S.; Kobylecki, C. J.; Nordestgaard, B. G. & Langsted, A. (2019). The Christmas holidays are immediately followed by a period of hypercholesterolemia. *Atherosclerosis*, 281, 121-127. <http://doi.org/dr4p>
- [38] Vivek, S. D.; Beatty, S. E. & Morgan, R. M. (2012). Customer engagement: Exploring customer relationships beyond purchase. *The Journal of Marketing Theory y Practice*, 20(2), 122-146. <http://doi.org/gf7kk6>

Notes

1. Carlos Ríos stopped running his Twitter account on 18 December 2019 due to, in his own words, the 'harassment' he suffered on this network. https://twitter.com/nutri_rivers/status/1207302733428088832 The account is still active but is run by someone else now.

2. Data updated on 10 April 2020.

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