Public Perceptions of Ultra-Processed Products
Findings From Studies of Adults in Brazil and Colombia
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INTRODUCTION

Scholars in South and Central America were arguably among the first in the world to recognize the health risks posed by “ultra-processed foods.” Monteiro and colleagues in Brazil were early proponents of naming ultra-processed foods—defined as foods that undergo significant industrialized processing.

In recent years, global consensus on addressing ultra-processed foods has grown as a result of the increasing and firm evidence linking such foods with chronic disease.¹ There is now recognition that public policies must specifically focus on ultra-processed foods as a means of reducing the public health burden. Currently there are public health policy approaches – front-of-package warning labels, taxes on sugary drinks and restrictions on marketing of junk food – that can result in reduced consumption of ultra-processed foods and beverages.

Public support is crucial for such policies to pass. Yet there is limited available data measuring the public’s understanding of ultra-processed foods. (4) As public policy efforts engage citizens to support regulation of these products, it will be important to consider what, if anything, people currently know about ultra-processed products, as well as what they associate with this terminology.

There is a preference among some advocates to use the term ultra-processed products rather than ultra-processed foods, to underscore that while processed items may be edible, they lack the nutritional value to be labeled as food. While ultra-processed food is the more familiar term, these studies tested knowledge on the term ultra-processed products to determine whether it could be a viable term to use moving forward.

¹ The term ultra-processed product has been used in general but ultra-processed food or the precise terms used in the questionnaire has been used in other instances.
As part of the Bloomberg Philanthropies Food Policy Program, Vital Strategies supported studies that were conducted in Brazil and Colombia in 2017 and 2018, which included several questions on public perceptions of ultra-processed foods and products. While the study is limited to two countries, the findings represent the views of the public in countries that are arguably at the forefront of public policy efforts related to ultra-processed foods. As such, they provide instructive insights on the importance of communicating with the public to build policy consensus on regulating ultra-processed foods.

This research brief summarizes key findings from the available data. These findings offer a baseline against which outcomes of future communication on the negative effects of ultra-processed foods can be compared. The next round of evaluations on ultra-processed products terminology have already begun in Brazil, Colombia and several other countries.

**KEY FINDINGS**

**Public Awareness of the Terminology: Findings From Surveys in Brazil**

*Public knowledge of the term ultra-processed product was generally low.*

In Brazil, in 2017 a nationwide mass media campaign was broadcast to encourage the public to make connections between unhealthy foods and negative health consequences. Vital Strategies conducted pre- and post-campaign surveys to assess, among other things, awareness of and reactions to the term ultra-processed products.

In both the pre- and post-campaign survey, about a third of participants reported being aware of the term ultra-processed products.
**Communication campaigns on unhealthy diets helped increase public awareness of ultra-processed products**

In the post-campaign survey, 36% of those who had seen the mass media campaign reported having heard the term ultra-processed products, whereas only 29% who were not aware of the campaign had heard the term.

![Bar chart](attachment:image.png)

**Figure 1**
Participants were asked “Have you ever heard of the term ultra-processed products?”
Data based on cross-sectional, nationally representative surveys of adults ages 18-55 in Brazil. Post-campaign wave I conducted from December 5-18, 2017, and wave II from January 12-25, 2018.

**Public knowledge of what constitutes ultra-processed products is also low**

In the surveys in Brazil, those who were aware of the term ultra-processed products were asked a follow-up question on which products came to mind when they heard the term. The foods most frequently associated with the term were: burgers, French fries, and hot dogs; followed by ham, turkey, sausages; and then sodas and packaged snacks. The items that were less frequently associated with the term ultra-processed products included fast food, ice cream, carton juice, and ready-made or pre-packaged meals. As the table below indicates, there was little change in responses from the pre-to post-campaign survey. One exception was fast food; after the campaign, the percentage of respondents who associated fast food with ultra-processed products
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more than doubled. Overall, communication campaigns may be helping to raise awareness of the term ultra-processed products but, as their primary objective was to inform about the health consequences of an unhealthy diet not the definition of ultra-processed foods, they have not improved clarity on the products that fall under this category.

Figure 2.
Participants were asked “What products come to your mind when you think of ultra-processed products?” Anything else? What else?” Data based on cross-sectional, nationally representative surveys of adults ages 18-55 in Brazil. Pre-campaign conducted Oct. 10-31, 2017; post-campaign wave I December 5-18, 2017; wave II January 12-25, 2018. *Significant at p-value < 0.05

Public Reactions to the Terminology: Findings From Focus Groups in Colombia

While the term ultra-processed foods may not have been familiar to many, images triggered strong associations and emotional responses, and most felt the products pictured were harmful to health.

In focus groups discussions conducted in Colombia in 2017, participants were shown images of ultra-processed foods and asked to describe their feelings and reactions to them.
The feeling most frequently associated with ultra-processed foods was that they were harmful to health (60%). Many said the photos solicited cravings (35%) and associations with taste (31%). The figure below shows participants’ reactions, including the least frequently mentioned emotional response triggered by ultra-processed foods: pleasure and satisfaction.

<table>
<thead>
<tr>
<th>Feelings associated with ultra-processed foods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harmful to health 60%</td>
</tr>
<tr>
<td>Taste 31%</td>
</tr>
<tr>
<td>Cravings 35%</td>
</tr>
<tr>
<td>Joy/Happiness 27%</td>
</tr>
<tr>
<td>Hungry 17%</td>
</tr>
<tr>
<td>Pleasure 10%</td>
</tr>
<tr>
<td>Satisfaction 10%</td>
</tr>
<tr>
<td>Practicality /speed 15%</td>
</tr>
<tr>
<td>Fry/Fatty 13%</td>
</tr>
<tr>
<td>Anxiety 10%</td>
</tr>
</tbody>
</table>

Sample (n) = 48
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Figure 3
Focus group participants were asked “Here on this board are a number of foods that people in our country typically consume. Thinking of this picture, please answer, what feelings do you experience?” Focus groups conducted among adults ages 25-55 years in Colombia in October 2017.

When asked to visualize what came to mind in response to the pictures of ultra-processed foods, participants most frequently associated them with family (50%), followed by breakfast (42%). Children (21%), school (19%), and malls (15%) were the least associated with ultra-processed foods.

![Associations with ultra-processed foods](image)

**Sample (n) = 48**

Figure 4
Focus group participants were asked “Here on this board are a number of foods that people in our country typically consume. Thinking of this picture, please answer, what visuals or images do you associate with these foods? What images, what visuals come to mind?” Focus groups conducted among adults ages 25-55 years in Colombia in October 2017.

**Alternative Terms for Ultra-Processed Foods: Findings From Focus Groups in Brazil and Colombia**

To assess the effectiveness of the term ultra-processed foods when compared with alternatives, focus group participants in Brazil and Colombia were presented with a range of terms related to unhealthy foods (see table below for the full list in each country). Participants were asked to rate the terminology across a series of attributes.
known to predict communication effectiveness, including memorability, appropriateness, clarity in meaning, ease of understanding and effectiveness.

While participants in each country did not receive an identical list of terms to respond to, there was considerable overlap. In both countries, respondents rated the effectiveness of junk food, unhealthy food, trash, and ultra-processed food. Additional terms discussed in Colombia included: non-healthy eatable (translated as ‘edible’) products, nonessential food, ultra-processed eatable products and ultra-processed products. Additional terms discussed in Brazil included: industrialized food and unreal food.

<table>
<thead>
<tr>
<th>Brazil</th>
<th>Colombia</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Industrialized food</td>
<td>• Chucherías&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>• Junk food</td>
<td>• Galguerías&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>• Trash</td>
<td>• Junk food</td>
</tr>
<tr>
<td>• Ultra-processed food</td>
<td>• Mecato&lt;sup&gt;4&lt;/sup&gt;</td>
</tr>
<tr>
<td>• Unhealthy food</td>
<td>• Non healthy eatable products</td>
</tr>
<tr>
<td>• Unreal food</td>
<td>• Nonessential food</td>
</tr>
<tr>
<td></td>
<td>• Trash food</td>
</tr>
<tr>
<td></td>
<td>• Ultra-processed food</td>
</tr>
<tr>
<td></td>
<td>• Ultra-processed products</td>
</tr>
<tr>
<td></td>
<td>• Unhealthy food</td>
</tr>
<tr>
<td></td>
<td>• Unhealthy processed eatable products</td>
</tr>
</tbody>
</table>

Table 1
Terms tested in Brazil and Colombia as alternatives to the term ultra-processed foods.

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<sup>2</sup> Chucherías are small sweets that are usually obtained from street vendors, it is what you buy after having lunch.

<sup>3</sup> Galguerías is an intermediate portion, mainly referring to bakery products and dairy drinks.

<sup>4</sup> Mecato is the largest portion, usually used for trips, family outings to share with several people.
The term ultra-processed food was seen as least effective or appropriate in both Brazil and Colombia; the term unhealthy food ranked high in both countries.

The term ultra-processed food was not well understood when compared to unhealthy food. Of the overlapping terms, unhealthy food ranked high as the preferred term in both Brazil and Colombia. It is interesting to note, however, that while the term junk food was rated highly in Colombia, it was among the least preferred terms for Brazilian participants. The two tables and figures below compare how the public reacted to different terms in each country.

As the table below indicates, in Brazil, the term industrialized food received the highest ratings across all measures. The majority of participants found it to be easy to understand (96%), thought it had a clear meaning (92%), and found it to be memorable (94%). Unhealthy food was the second highest-rated term after industrialized food. While still rated highly across several indicators, the terms unreal food and trash received lower ratings than the terms industrialized food and unhealthy food. The term junk food received the lowest ratings, and ultra-processed food was the second lowest-rated term to describe the products.

<table>
<thead>
<tr>
<th>In Brazil: Agreement that the product terms are... (%)</th>
<th>Industrialized food</th>
<th>Unhealthy food</th>
<th>Trash</th>
<th>Unreal food</th>
<th>Ultra-processed food</th>
<th>Junk food</th>
</tr>
</thead>
<tbody>
<tr>
<td>...is easy to understand</td>
<td>96</td>
<td>92</td>
<td>82</td>
<td>78</td>
<td>50</td>
<td>38</td>
</tr>
<tr>
<td>...has a clear meaning</td>
<td>92</td>
<td>90</td>
<td>82</td>
<td>78</td>
<td>44</td>
<td>38</td>
</tr>
<tr>
<td>...is memorable, it draws attention</td>
<td>94</td>
<td>96</td>
<td>90</td>
<td>88</td>
<td>74</td>
<td>68</td>
</tr>
<tr>
<td>...is suitable for describing all such products</td>
<td>86</td>
<td>68</td>
<td>50</td>
<td>48</td>
<td>50</td>
<td>42</td>
</tr>
<tr>
<td>...is a good term for describing all these products</td>
<td>86</td>
<td>70</td>
<td>56</td>
<td>54</td>
<td>44</td>
<td>42</td>
</tr>
</tbody>
</table>
In Colombia, the term unhealthy food ranked highest in regard to proportion clarity in meaning and ease of understanding, and the term junk food was rated highest for memorability and for its appropriateness in describing all the products shown.

<table>
<thead>
<tr>
<th>In Colombia: Agreement that the product terms are... (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Junk food</strong></td>
</tr>
<tr>
<td>...is easy to understand</td>
</tr>
<tr>
<td>...is an appropriate term to describe all these products</td>
</tr>
<tr>
<td>...is memorable (grabs my attention)</td>
</tr>
<tr>
<td>...is clear in its meaning</td>
</tr>
<tr>
<td>...is effective term to use to describe all these products</td>
</tr>
</tbody>
</table>

In Brazil, the term industrialized food tops the list of terms the public would use to describe ultra-processed foods.
Figure 7
Focus group participants were asked “several words have been presented as an alternative to the term junk food. Of all the terms you saw today, select the best term to describe all these products. Please tick one response.” Focus groups conducted among adults ages 25-55 in Brazil, in October 2017.

In Colombia, the terms junk food and unhealthy food were both considered to be more effective and appropriate terms when compared to ultra-processed food or products.

Figure 8
Focus group participants were asked the questions “Of all the terms you heard please select the one that you thought was most effective (or appropriate).” Focus groups conducted among adults ages 25-55 in Colombia in October 2017.
In focus group discussions conducted in Brazil, participants were also asked to free-associate with the terminology. These free associations, described in Figure 9, elucidate the ratings obtained.

**Associations with alternative terms for ultra-processed foods**

<table>
<thead>
<tr>
<th>Ultra-processed food</th>
<th>Unhealthy food</th>
<th>Junk food</th>
<th>Trash</th>
<th>Industrialized food</th>
<th>Unreal food</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Makes me think of sausages, something compound&quot; (M/C)</td>
<td>&quot;I don't know the real meaning, I associate it with fast food and unhealthy food&quot; (M/C)</td>
<td>&quot;Food&quot; evokes something fast, convenient&quot; (F/AB)</td>
<td>&quot;Everything that is tasty (...) that you shouldn't be eating&quot; (H/C)</td>
<td>&quot;Our metabolism is already industrialized (...) we don't live in the country&quot; (F/C)</td>
<td></td>
</tr>
<tr>
<td>&quot;The word ultra stresses it, that it's something beyond the regular process, or a lot of things jumbled together&quot; (M/C)</td>
<td>&quot;It depends on how you prepare it, for instance, French fries can be baked instead of fried&quot; (F/C)</td>
<td>&quot;Food&quot; evokes something fast, convenient&quot; (F/AB)</td>
<td>&quot;We know it's bad, it'll do us harm... Specially for mothers, we know we won't buy it, it's trash (...) It's easy to explain it to kids&quot; (F/C)</td>
<td>&quot;If it's not natural, it's industrial, practically all of them are&quot; (M/AB)</td>
<td></td>
</tr>
<tr>
<td>&quot;What comes to mind is a huge grinder&quot; (F/AB)</td>
<td>&quot;But it's not nice saying that food is trash&quot; (F/C)</td>
<td>&quot;You say it's trash, eat just a little (...) but these days they already learn in school that 'it's not healthy'&quot; (F/AB)</td>
<td>&quot;If it's industrialized, it's been through some kind of process&quot; (F/C)</td>
<td>&quot;Everything that has an aroma and a taste, but it is not, for instance, Tang juice has sugar, fruit taste, fruit color, but it is not fruit&quot; (F/C)</td>
<td></td>
</tr>
</tbody>
</table>

Sample size (n) = 48

**Figure 9.** What products come to your mind when you think of the (...) food? What else? Is there anything that comes to your mind?

Abbreviations: F, female; M, male; AB, class AB; C, class C

**The Unhealthy Food Umbrella**

Qualitative feedback to helped bolster understanding of the public's connections with the term ultra-processed products and the various other terms that are used to describe such products.
Participants identified the connections between all of the terms discussed and agreed that all the edible products presented (both food and drink) fall under one umbrella term called unhealthy food.

“Unhealthy food is the most effective; at first sight, you know that you will consume something that is not good for your body.”

Figure 10. Evaluation of terms.

It should be noted that participants found the terms ultra-processed eatable products, ultra-processed food and ultra-processed products, confusing. For example, some participants recognized that there are other types of ultra-processed products that are not edible, which may or may not fall under that broader umbrella term. Also, participants often associated these terms with items that are chemically processed. These reactions suggest that if such technical terms are to be used in future campaigns, there needs to be an explanation of what the terms mean to eliminate any confusion.

5 The umbrella term is used to reflect the result of the qualitative analysis where grouping of terms was generated.
CONCLUSION

The data analyzed from these studies indicate that while the public has limited awareness of the terms ultra-processed products or ultra-processed foods, they have a strong sense of what they describe. However, there is confusion, and in some cases disagreement, surrounding the best terminology to describe these products. In Brazil, for example, the term junk food was not highly rated as an acceptable term by survey participants, while respondents in Colombia appreciated its clarity and descriptive nature.

More significantly, it should be noted that there is not broad acceptance of such technical terms as ultra-processed products or foods. Moving forward, food policy experts will need to decide whether it is more important to use a more widely understood term or invest in efforts that increase awareness of the term ultra-processed products and the products it describes.

Finally, it should be noted that since this study was conducted in 2017, coalitions in Brazil and Colombia have implemented several comprehensive communication strategies to inform people about the harmful impact of unhealthy food, and have used the term ultra-processed food widely throughout their communication materials. Therefore, while the data and findings presented in this brief are based on initial communication efforts (exploratory research, pre-campaign and early campaign evaluations), it is highly likely that the public’s perception and understanding of ultra-processed and unhealthy food has changed since then. The next round of terminology evaluations in Brazil, Colombia, and several other countries, are already underway.

METHODS

The data analyzed in this brief was retrieved by Vital Strategies as part of three exploratory studies in Brazil and Colombia in 2017 and 2018. A synopsis of these reports can be found below:
Brazil exploratory study, 2017
In 2017, Vital Strategies conducted focus groups in Brazil to test concepts intended to support the regulation of marketing of ultra-processed foods directed to children and the approval of front-of-pack labels by raising awareness of the harms of unhealthy diets, changing attitudes toward unhealthy products and promoting healthy behaviors. Five groups of adult men and women ages 25 to 55 years were recruited to this study, including parents and non-parents and people who consumed different amounts of unhealthy drinks and food. Although not the primary focus of the study, participants were asked a few questions related to ultra-processed food.

Colombia exploratory study, 2017
In 2017, Vital Strategies conducted focus groups in Colombia to test concepts intended to support the regulation of advertising, promotion and sponsorship of ultra-processed foods that affect children. The concepts were designed to raise awareness of the harms of unhealthy diets, change attitudes toward unhealthy products and promote healthy behaviors. Five groups of adult men and women ages 25 to 55 years, including parents or primary caregivers of children, were recruited to this study. Participants were asked questions related to different terms used to described unhealthy food and drink products, including the term ultra-processed products.

Brazil pre-post evaluation, 2017
In 2017, a nationwide mass media campaign was broadcast in Brazil. The campaign aimed to shift public attitudes on the prevalence and health consequences of obesity, especially in children, and build public support for regulations related to the marketing of unhealthy foods to children, including the implementation of clear front-of-pack labeling. The nationally representative household study involved cross-sectional surveys conducted in two waves: the first in October 2017 and the second in January 2018. In-person interviews were conducted, with 1,439 and 1,566 adults in each survey, respectively. The study measured public knowledge, attitudes and practices related to food purchasing and consumption.
REFERENCES


