

# ADAPTING THE FOOD CHOICE QUESTIONNAIRE TO THE PORTUGUESE CONSUMPTION OF RICE THROUGH THE USE OF IMAGES

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## INTRODUCTION

The Food Choice Questionnaire (FCQ) (Step toe et al, 1995) is a well-known tool that has been used across many countries and cultures to access consumers' food choice criteria. However, as food choices are culturally dependent, there is a need to adapt the questionnaire's concepts in accordance with those used by the respondents from a given culture (Cunha et al, 2018). As images are known to be creativity inducers, they can be used as a mean to turn concepts into broader ones, so, they can be adapted to a new reality. To adjust the FCQ's concepts to the Portuguese reality, particularly focusing on the consumption of rice, an innovative method based on images was developed.

## METHODS

The complete method is carried out in two phases: the first regarding the selection of images based on the FCQ and the second regarding the generation of concepts (Castanho et al, 2017); this poster reports the first phase.

FCQ items were selected according to its aptitude to be transposed in images; additional items were acquired from interviews carried out within the scope of Project Arroz BIG, resulting 38 items. For each of the items, three images were selected by Google image search or by direct photo shooting.

A questionnaire regarding the selection of an image per item was developed with the Lime Survey software; images and questions were randomized. For each selected image, participants were asked to rate the adequacy of the image to represent the stated item on a 7-point anchored scale (from 1 – "Not adequately at all", to 7 – "Totally adequate").

Data obtained were statistically analysed with IBM SPSS Statistics v.25. Non-parametric tests - Kruskal-Wallis and Mann-Whitney - were used to test differences on the adequacy rating of each of the selected images, within each item. Selection of the different photos between the different socio-demographic groups was performed, for each item, following a chi-squared test.

## RESULTS

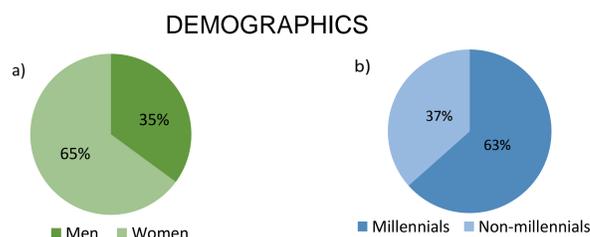


Figure 1. Structure of the sample (n=134) a) Participants by sex; b) Participants by generation, considering Millennials those who were born during 1980 and onwards and Non-millennials all those born before 1980.

"It can be cooked very simply"  
82%



Figure 2 – Association of the pre-selected images with the FCQ's item "It can be cooked very simply".

"It contains no additives"  
86%



"It is low in fat"  
87%

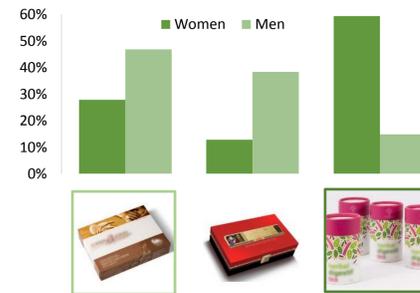


Figure 3 – Association of the pre-selected images with the FCQ's item "It contains no additives". Figure 4 – Association of the pre-selected images with the FCQ's item "It is low in fat".

## Aknowlegements:

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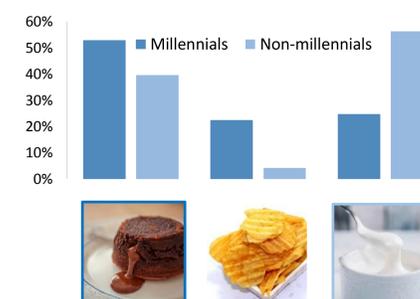
## PREFERENCE FOR IMAGES CONSIDERING SEX



"It has an appealing packaging"

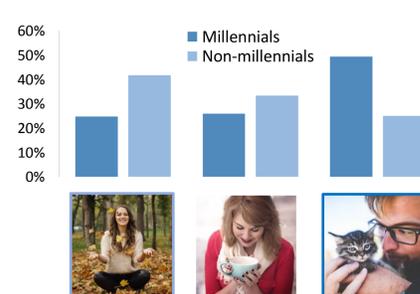
Figure 5 – Association of the pre-selected images with the FCQ's item "It has an appealing packaging", according to the sex of the respondent.

## PREFERENCE FOR IMAGES CONSIDERING THE AGE GROUP



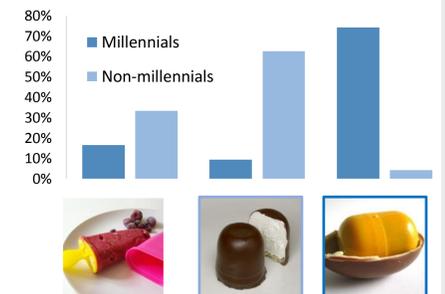
"It has a pleasant texture"

Figure 6 – Association of the pre-selected images with the FCQ's item "It has a pleasant texture", according to the age group of the respondent.



"It makes me feel good"

Figure 7 – Association of the pre-selected images with the FCQ's item "It makes me feel good", according to the age group of the respondent.



"It is like the food I ate when I was a child"

Figure 8 – Association of the pre-selected images with the FCQ's item "It is like the food I ate when I was a child", according to the age group of the respondent.

## DISCUSSION AND CONCLUSIONS

- Although all the 134 participants live or were born in Portugal, **the relation between images and concepts depend on sex and age group.**
- There is a significant division ( $p < 0,05$ ) between **generations** regarding the choice of images for 26% of the questions.
- The differences between male and female decisions are not so evident, however, on 16% of the images, **men and women differ on their options** ( $p < 0,05$ ).
- For seven of the 38 items, the participants considered that none of the images of their choice was strongly related with the concept. Those items will demand further developments.
- These results will contribute to the improvement of the second phase of this activity.

## References

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