

## Perception of industrialized orange juice: Food experts vs. lay consumers

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### Abstract

We evaluated the difference about industrialized orange juice perception among consumers that studied food technology/science/engineering (food experts) and lay consumers. The research used online questionnaires (blind and informed about processes/products characteristics) with check-all-that-apply (CATA) test. Results showed that food experts and lay consumers have the same concept about fresh squeezed orange juice and about powdered drink mix. On the other hand, the term "industrialized juice" and the samples "not from concentrated" (pasteurized) and "ultra-high temperature" (sterilized) were associated to durability and process characteristics for food experts, and to depreciatory terms by lay consumers. Better evaluation of this samples were observed in informed questionnaire, highlighting that correct information allows consumers to make more conscious choices about their juices.

### Key words:

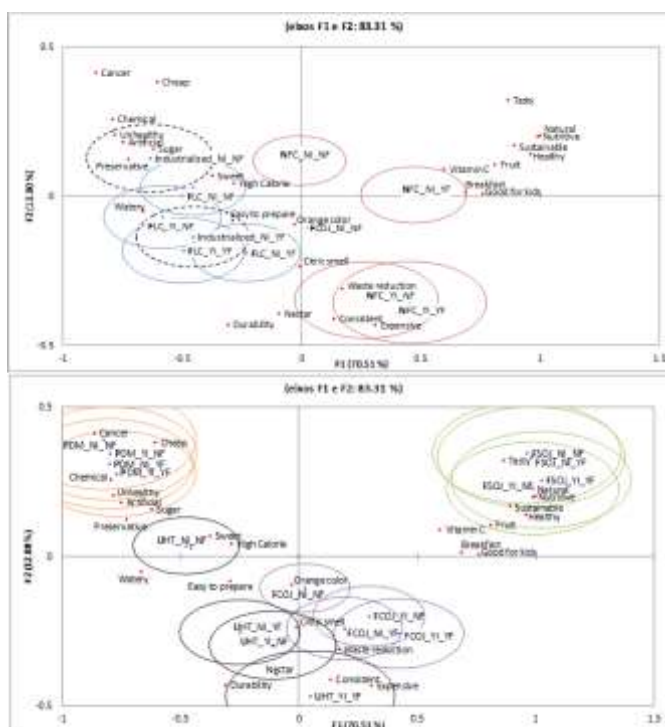
Consumers perception, industrialized orange juice, online questionnaire

### Introduction

Orange juice is the most consumed juice around the world, including in the industrialized form. Processed food rejection is increasing, associated to the perception of unhealthy food<sup>1</sup>. This study aimed to distinguish the perception of different industrialized orange juice by food experts and lay consumers, as well as understand how this perception can change according to the information received.

### Results and Discussion

**Image 1.** Correspondence analysis of industrialized orange juice samples using check-all-that-apply findings



FSOJ= Fresh squeezed orange juice. NFC= Not from concentrated orange juice (pasteurized). UHT = Ultra high temperature orange juice (sterilized). FCOJ = Frozen concentrated orange juice. FLC = Fruit liquid concentrated. PDM = Powdered drink mix. NI = not informed test. YI = informed test. NF = lay consumers. YF = food experts.

Results (Image 1) showed that consumers have an ingrained concept about FSOJ (positive) and PDM (negative), being the evaluation of these juices similar among food experts and lay consumers and in blind and informed tests.

NFC was the sample that had the biggest difference between the answers of expert consumers (described NFC closer to FSOJ) and lay people (described NFC closer to PDM) in blind test. Similarly, "Industrialized", UHT, FLC and FCOJ had worse evaluation by lay consumers than by food expert in blind test, indicating the major and generalized rejection of processed juice by the lay consumers.

On the other hand, informed test showed that experts and lay consumers used similar terms to described each juice and that the overall evaluation of FCOJ, UHT and NFC was improved in it. These results highlight the importance of explains the industrialization characteristics for the consumers.

### Conclusions

- Food experts and lay consumers have different perceptions of industrialized juice (processed juices are considered worse by lay consumers than by experts);
- Consumers have an ingrained concept about FSOJ (positive) and PDM (negative);
- When informed, lay and food expert consumers tend to have similar perception of each juice;
- Overall perception of industrialized juices had improved when information about juice processing was given.

### Acknowledgement

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<sup>1</sup>Rego, R.A., Vialta, A, Madi, L. Alimentos industrializados: a importância para a sociedade brasileira. 1ª Ed. Campinas: ITAL. 2018.