University consumers perceptions regarding food waste and sustainability

Introduction
Approximately one-third of the food produced globally is wasted through the food chain, representing a burden on the environment, society, and the economy. Fighting against food waste is a priority on the global political agenda to ensure food security. It is needed to detect the different concepts on the connection between sustainability and food waste, in regard to the exponential increase in the environmental impact in the food chain (EUROPEU-PE, 2012; G. FAO, 2011; I. FAO & UNICEF, 2018). Is estimate that in Portugal around 17% of edible parts for human consumption are wasted, and around 1 million tons of food are wasted annually. (Baptista, Campos, Pires, & Vaz, 2012).

The impact of food waste and losses is widespread through the economy, society, and the environment (Gustavsson, Cederberg, & Sonesson, 2011). Studies show that the consumer’s knowledge regarding the food they purchase and its effect on the environment is low, those studies emphasize that, only through education, consumers will recognize the value of food in sustainable practice, and the importance of the food supply chain (Ghosh, Fawcett, Sharma, & Poinern, 2016).

Therefore, there are few previous studies that address sustainability with food waste or even that address consumer perceptions of sustainability, those highlights the importance of more scientific research and questions that don’t have been resolved. So, the present project has an original view because it aims to evaluate the consumer’s perceptions at the university level regarding food waste and the understanding of sustainability which in previous studies, were mainly dedicated to the evaluation of food waste itself and not to the simultaneity between them.

Aim
- Assess the consumer’s perception at the university level regarding food waste and the understanding of sustainability.
- Identify the familiarity and knowledge about sustainability and food waste at the university students’ level.
- Understand the motivation and attitude of university consumers through food waste and sustainability.
- Identify the perception of the possible relationship between sustainability and food waste.
- Recognize the actions taken by university students in food waste reduction.

Methodology
The study was carried out with university students from Porto University, Portugal. The investigation was conducted with university students, including doctoral students and master’s students, with an age limit of 18 years old and without maximum age limitation. It is a convenience sample. The calculation of the sample size, for a correlation of 0.2 to be significant with alpha = 0.05 and beta = 0.2, the minimum sample size is 194 participants.

As an instrument of investigation it was made a questionnaire, structured and of indirect administration to Porto university students. The questionnaire was constructed in Portuguese and distributed on digital platforms. The questions were prepared in a clear, objective and appropriate way to the target group. The format of the questionnaire includes multiple-choice and Likert scale. The questionnaire initially includes a brief description of the work, followed by informed consent. The first part A of it, corresponds to the characterization of the population with questions directed to the socioeconomic and demographic aspects. Then, part B, is made up of questions related to the theme of sustainability and food waste. The questions focus on the consumers perceptions in the aspects that touch familiarity, attitude, motivation, knowledge, and practices alluding to the theme of food waste and sustainability.

Data collection was carried out, during the months of February and March 2021. As a tool to assist in the collection, a pre-test of the questionnaire was made with a total of 10 people, with 5 respondents answered the questionnaire online and 5 responded in person. The purpose of the pre-test was to verify the adequacy and applicability of the questions in relation to the clarity of the questions, objectivity, and adequacy of the instructions. The realization of the pre-test made it possible to know the difficulties of the participants in completing it and based on the feedback, some questions were reformulated or modified for the official disclosure of the same.

Data analysis is being done by the Statistical Package for Social Sciences (IBM SPSS), where the descriptive analysis involve calculations of mean, standard deviation, frequencies, among other necessary tests to evaluate the results.

Results
The previous results of a total of n=539 answers point to a gap in the students’ perception of the total amount of food wasted in the world but at the same time a positive attitude regarding the environmental factors and the importance of food waste and sustainability topic. Besides this, a high percentage of the university students (77%), recognize that there is high related connection between food waste and sustainability, even though, a significant percentage of the students (60%), point that they haven’t received enough information about food waste and sustainability during education time which can be noticed in some results.

Conclusion
It is expected to better understand the university consumers’ perception of food waste and sustainability and that the analysis of this study, can contribute to the education of consumers as well as the establishment of policies in this area.

References